

NAVAL POSTGRADUATE SCHOOL MONTEREY, CALIFORNIA



THESIS

REINVENTING MILITARY RETIREMENT

by

Mark D. Pyle

December, 1995

Thesis Advisor:

Richard B. Doyle

Approved for public release; distribution is unlimited

19960405 090

DTIC QUALITY INSPECTED 1

REPORT DOCUMENTATION PAGE			Form Approved OMB No. 0704-0188	
Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instruction, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188) Washington DC 20503.				
1. AGENCY USE ONLY (Leave blank)		2. REPORT DATE December, 1995		3. REPORT TYPE AND DATES COVERED Master's Thesis
4. TITLE AND SUBTITLE: Reinventing Military Retirement			5. FUNDING NUMBERS	
6. AUTHOR(S) Mark D. Pyle				
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Naval Postgraduate School Monterey CA 93943-5000			8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)			10. SPONSORING/MONITORING AGENCY REPORT NUMBER	
11. SUPPLEMENTARY NOTES The views expressed in this thesis are those of the author and do not reflect the official policy or position of the Department of Defense or the U.S. Government.				
12a. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release; distribution is unlimited.			12b. DISTRIBUTION CODE	
13. ABSTRACT (maximum 200 words) <p>The thesis examines the possibility of applying private sector retirement plan principles to the military retirement system. The increasing cost and generosity of military retirement coupled with political pressures to reduce federal spending have focused attention on reforming the military retirement system. Previous studies of the military retirement system are addressed and critiqued. Private retirement options are reviewed and a 401(k) plan is proposed to replace the current military retirement system. The new retirement system would eventually reduce federal outlays for military retirement by 66 percent while covering all service members. The role of retirement compensation in shaping force structure and retention are addressed. The thesis concludes that privatizing military retirement is feasible and less costly than the current military retirement system while still meeting most of the objectives of military retirement compensation.</p>				
14. SUBJECT TERMS: Military, Retirement, Compensation, Reinventing			15. NUMBER OF PAGES 121	
			16. PRICE CODE	
17. SECURITY CLASSIFICATION OF REPORT Unclassified		18. SECURITY CLASSIFICATION OF THIS PAGE Unclassified		19. SECURITY CLASSIFICATION OF ABSTRACT Unclassified
				20. LIMITATION OF ABSTRACT UL

NSN 7540-01-280-5500
298 (Rev. 2-89)

Standard Form

Prescribed by ANSI Std. Z39-18

Approved for public release; distribution is unlimited

REINVENTING MILITARY RETIREMENT

Mark D. Pyle
Lieutenant, United States Navy
B.S.M.E., University of Maryland, 1989

Submitted in partial fulfillment of the
requirements for the degree of

MASTER OF SCIENCE IN MANAGEMENT

from the

**NAVAL POSTGRADUATE SCHOOL
December 1995**

Author:

Mark D. Pyle

Mark D. Pyle

Approved by:

Richard B. Doyle

Richard B. Doyle, Thesis Advisor

Louis Kalmar

Louis Kalmar, Second Reader

Reuben Harris

Reuben Harris, Chairman,
Department of Systems Management

ABSTRACT

The thesis examines the possibility of applying private sector retirement plan principles to the military retirement system. The increasing cost and generosity of military retirement coupled with political pressures to reduce federal spending have focused attention on reforming the military retirement system. Previous studies of the military retirement system are addressed and critiqued. Private retirement options are reviewed and a 401(k) plan is proposed to replace the current military retirement system. The new retirement system would eventually reduce federal outlays for military retirement by 66 percent while covering all service members. The role of retirement compensation in shaping force structure and retention are addressed. The thesis concludes that privatizing military retirement is feasible and less costly than the current military retirement system while still meeting most of the objectives of military retirement compensation.

TABLE OF CONTENTS

I.	INTRODUCTION.....	1
A.	BACKGROUND.....	1
B.	OBJECTIVES.....	5
C.	RESEARCH QUESTION.....	6
D.	SCOPE AND LIMITATIONS.....	7
E.	METHODOLOGY.....	8
F.	ORGANIZATION OF STUDY.....	8
II.	BACKGROUND AND EVOLUTION OF MILITARY RETIREMENT.....	13
A.	INTRODUCTION.....	13
B.	EVOLUTION OF MILITARY RETIREMENT.....	13
1.	1855 - 1984	13
2.	1984 - Present	16
C.	THE EXISTING MILITARY RETIREMENT SYSTEM.....	18
1.	Members Entering Service Before September 8, 1980	20
2.	Members Entering Service After September 8, 1980	20
3.	Members Entering Service After August 1, 1986	21
D.	THE MILITARY RETIREMENT FUND.....	21
E.	COST COMPARISONS WITH CIVILIAN COMPENSATION PLANS.....	26
F.	CONGRESS, THE DEFICIT AND MILITARY RETIREMENT.....	29
G.	SUMMARY.....	33
III.	STUDIES OF ALTERNATE RETIREMENT SYSTEMS.....	35

A.	INTRODUCTION.....	35
B.	PURPOSE OF MILITARY RETIREMENT.....	35
C.	PRESIDENT'S COMMISSION ON MILITARY COMPENSATION....	36
D.	GRACE COMMISSION.....	40
1.	Proposals	40
2.	Criticisms	41
E.	FIFTH QUADRENNIAL REVIEW OF MILITARY COMPENSATION.....	42
1.	Significant Findings	42
2.	Significant Recommendations	43
F.	SUMMARY.....	45
IV.	PRIVATE SECTOR RETIREMENT OPTIONS.....	47
A.	INTRODUCTION.....	47
B.	RETIREMENT PLANS.....	48
1.	Defined Benefit Plans	48
2.	Defined Contribution Plans	49
a.	Thrift Savings Plans	49
3.	Individual Retirement Accounts	50
4.	Salary Reduction Plans	51
a.	401(k)s	52
b.	403(b)s	53
C.	SUMMARY.....	54
V.	THE PROPOSAL.....	57
A.	INTRODUCTION.....	57
B.	COSTS COMPARISONS OF MILITARY RETIREMENT PLANS....	58
1.	Current Military Retirement System	58

2. Option 1 Non-contributory 401(k) 29.8%	
Government Matching.	61
3. Option 2 - Typical civilian 401(k) Plan	62
C. THE PROPOSAL.....	64
D. BENEFITS AND DRAWBACKS OF ADOPTING A 401(k).....	69
1. Benefits	69
2. Drawbacks	70
E. MAINTENANCE COSTS AND MANAGEMENT OF PRIVATIZING	
MILITARY RETIREMENT.....	72
F. PRIVATIZATION AND THE MILITARY RETIREMENT FUND....	73
G. SUMMARY.....	75
VI. RETIREMENT COMPENSATION AND FORCE MANAGEMENT.....	77
A. INTRODUCTION.....	77
B. CURRENT RETIREMENT SYSTEM AND FORCE MANAGEMENT....	77
C. CRITICISMS OF THE CURRENT MILITARY RETIREMENT	
SYSTEM.....	80
D. RETIREMENT PRIVATIZATION AND FORCE MANAGEMENT.....	81
1. Graduated Matching Funds	83
2. Withholdings for Early Separation	83
3. Elimination of Retirement as a Force	
Management Tool	84
E. SUMMARY.....	85
VII. CONCLUSIONS AND RECOMMENDATIONS.....	87
A. SUMMARY.....	87
B. RECOMMENDATIONS.....	91
C. CONCLUSION.....	93

D. FURTHER RESEARCH OPPORTUNITIES.....	94
LIST OF REFERENCES.....	95
BIBLIOGRAPHY.....	99
INITIAL DISTRIBUTION LIST.....	105

LIST OF FIGURES

2.1 Breakdown of Payments Within the Military Retirement Fund, FY 1994.....	19
2.2 Cash Flow for the Military Retirement Fund, FY 1993....	24
6.1 Continuation Rates for Navy Enlisted Personnel, FY 1990.....	78
6.2 Continuation Rates for Navy Officer Personnel, FY 1990.....	79

LIST OF TABLES

2.1	Normal Cost as a Percent of Base Pay, FY 1994.....	25
5.1	Military Retired Pay, Lump Sum and Deposits (Officers).....	59
5.2	Military Retired Pay, Lump Sum and Deposits (Enlisted).....	59
5.3	401(k) Savings Plan with 29.8 Percent Matching (Budget Neutral).....	62
5.4	401(k) Savings Plan with 5 Percent Matching and 10 Percent Member Contribution.....	63
5.5	401(k) Savings Plan with 10 Percent Matching and 10 percent Member Contribution.....	65
5.6	Comparison of Lump Sum Equivalents for Several Retirement Plans.....	67

I. INTRODUCTION

A. BACKGROUND

The military compensation system has remained fundamentally unchanged since the end of World War II (Ref. 1, p. xiii). Over ten major studies have been conducted since 1945 analyzing the military compensation pay structure. Most of the studies have concentrated on three specific areas:

1. Attracting and retaining quality personnel in sufficient numbers to accomplish the military's mission.
2. Promoting an efficient distribution of service members by grade and years in service.
3. Accomplishing these goals at least cost to the government.

Retirement compensation is one part of the total pay structure for the military. This study will concentrate on the possibility of privatizing military retirement and its effect on force structure. Emphasis will be on attracting and retaining high quality individuals to the military by employing private sector compensation policies, reducing the cost to the government, and increasing employees flexibility and control of their financial future.

The Republican takeover of both houses of Congress is accelerating efforts to reduce the power and scope of the

federal government. A wave of government reforms is underway and the current movement to reinvent government is gaining momentum. Reforms such as eliminating entire cabinet positions and abolishing the IRS in favor of a much simpler tax system are getting very serious thought by many members of Congress. The prospect of rethinking the role of every government program and organization suggests that the climate is right for change. Congress will continue to look at new ways to decrease federal spending and the military retirement system may be scaled back or changed as part of an effort to reduce spending and balance the federal budget.

The federal government, including the Department of Defense, is experiencing tremendous budgetary pressure to reduce cost. The military may gain some insight into innovative ways to cut cost by observing how corporate America has dealt with similar problems. For example, the competitive nature of the global economy has created new incentives for corporate America to reduce costs and has forced many large businesses to rethink their entire organizational and cost structure. In May of 1995, the Commission on Roles and Missions of the Armed Forces, citing cost reductions of 20 percent, endorsed outsourcing activities that need not be performed in the federal government. (Ref 28, p. ES-6) The military retirement system may be a government function that could be performed by private organizations.

With respect to retirement policy, the trend in large businesses is to eliminate pensions and replace them with employee contribution plans such as 401(k)s and 403(b)s to reduce cost. (Ref. 3, p. 635) Today, 96 percent of all companies with more than 5000 employees offer 401(k) plans. (Ref. 2, p. 38)

Large corporations have adopted 401(k)s which provide a wide range of tax deferred savings and investment options which give the employees improved flexibility and control over their investment options. These flexible retirement plans offered by many businesses have been used to attract employees to work for their company. This same approach may be successfully applied to the military.

The military retirement system provides adequate compensation for the service members who stay in the military for twenty years or more. When the service member leaves the military after twenty years of service, the service member is entitled to a pension. However, any member who leaves the military prior to the twenty year point is normally not entitled to a military pension. Seventeen percent of all service members actually stay in the military for 20 years or more and receive retirement benefits. (Ref. 7, p. D-11) This is in sharp contrast to the 65-90 percent participation rates of 401(k)s offered by private corporations. (Ref. 2, p. 47)

Those who stay in the military for greater than twenty years enjoy above average retirement benefits and the

perceived assurance and stability of this benefit throughout the rest of their lifetime. Several government studies have shown that the value of the retirement benefit to service members far exceeds that received by their civilian counterparts, and the cost to the government has been significantly higher as well. (Ref. 5, p. 2, Ref. 6, p. IV-33) The high cost of military pensions relative to their civilian equivalents and the current budgetary climate suggest that the military pension is likely to be reduced.

The objective of the military retirement system is to provide adequate compensation to attract and retain high quality individuals to serve in the armed forces. This objective must not be overlooked in any attempt to redesign the military retirement system. The military must provide competitive compensation to attract the individuals that are needed for today's high technology military. However, there is significant budgetary pressure to reduce military retirement compensation.

Privatizing the military retirement system may be an option that Congress will consider as part of this process. Adopting private sector retirement policies may provide better compensation for all service members at less cost to the government while enhancing the integrity and survivability of the military retirement system. Additionally, privatization would allow all service members to participate in the military's retirement plan.

Replacing traditional retirement plans such as pensions with 401(k)s and 403(b)s has created a portable retirement system in corporate America. When an employee switches jobs, he can simply "roll over" his existing retirement plan to his new place of employment. This has diminished incentives for employees to stay with a company for long periods of time. Most civilians will experience as many as eleven major job changes in their working lives. (Ref. 4, p. 161)

However, the military cannot hire qualified individuals directly from the private sector to command ships, battalions and air wings. Qualified officers are developed over a period of time through experience and training. Thus retention of qualified officers and enlisted people is essential to maintaining the military's combat readiness. Privatizing the military retirement system may reduce the incentive to stay in the military and poses a significant limitation to the adoption of a private retirement plan.

B. OBJECTIVES

The objective of the thesis is to explore alternate military retirement systems to reduce the cost to the government and increase employee flexibility and control of their financial future. The thesis will examine the possibility of privatizing the military retirement system and the potential impact of this action on retention.

C. RESEARCH QUESTION

The primary research question is: Can the Uniformed Services Retirement System be substantially modified to reduce the cost to the government and increase employees flexibility and control of their financial future without adversely affecting retention? Subsidiary research questions include the following:

- What is the structure and logic of the existing retirement system for the U.S. military?
- How fiscally sound is the current military retirement system?
- What retirement policies available in the private sector might be adopted for use by the U.S. military?
- Is a privatized retirement system for the military feasible?
- How would the military force structure change under such a system?
- What effect will privatizing the military retirement system have on retention?
- What impact will these changes have on the officer ranks versus the enlisted ranks?
- What will be the cost to the government for the new retirement system?
- How will total compensation change for the individual service member and how will this compare to total compensation for civilians?

- What should Congress do with the Military Retirement Fund?

D. SCOPE AND LIMITATIONS

The thesis will begin with a brief description of the existing military retirement system, including the significant evolutionary changes. The impact on officer and enlisted retention from privatizing the military retirement system will be analyzed including the benefits, cost and management of the plan. Several private retirement plans such as defined contribution plans, profit sharing plans and defined benefit plans will be addressed and their applicability to the military will be examined.

Several past studies recommending changes to military compensation will be reviewed and their relevant findings, and criticisms presented. Although the studies that will be presented do not address privatization of military retirement, many recommendations argue for or against adopting some private sector policies.

Due to the sheer scope of military compensation policies, some issues will not be addressed in this study. This study concentrates on reinventing military retirement and will not examine other military pay structures such as base pay. The effect of the current retirement system on retention will be contrasted with a privatized plan. However, the impact on retention within or across the rank structure will not be

examined. Additionally, the concept of personnel incentives for "effort motivation" will not be applied to military retirement benefits.

E. METHODOLOGY

The research methodology will draw on previous government and private studies of military retirement compensation. Information will also be gathered from existing government documents, congressional records and previous theses.

The vast majority of large corporations have defined contribution plans in the form of 401(k)s. Various articles found in current publications and investment brochures will be used to explain these typical retirement plans.

Statistical data from the Department of Defense and private studies will be used to analyze the incentives for service members staying in the military. This data will be applied to interpret the potential impact on retention by privatizing military retirement.

F. ORGANIZATION OF STUDY

The thesis is divided into seven chapters presented as follows:

Chapter I: **INTRODUCTION**

Chapter II: **BACKGROUND & EVOLUTION OF
MILITARY RETIREMENT**

Chapter II will place the military retirement system in its historical context and look at the development and evolution of military retirement. The adoption of accrual based accounting and the creation of the Military Retirement Fund have made the cost of military retirement more visible in the budgetary process. This visibility, coupled with an increased interest in cutting entitlement spending as part of deficit reduction, has put the military retirement budget in a more vulnerable position in the budget process. Changes to the retirement system, effected as part of deficit reduction in the early 1990s, will be explained.

Chapter III STUDIES OF ALTERNATE RETIREMENT SYSTEMS

The military retirement compensation system has been the subject of more than ten major studies over the past 45 years. Three of these studies address the major issues associated with reforming military retirement. These three studies present recommendations that may influence the possibility of privatization of military retirement and will be reviewed in this chapter.

The first of these was the President's Commission on Military Compensation completed in 1978. This study recommended the establishment of a transition trust fund and annuity for members separating from service before the 20 year point. The findings of each of these studies as they

relate to privatizing military retirement will be presented and critiqued. (Ref 13)

The second study, completed by the Grace Commission in 1983, concentrated on reducing cost to the government by adopting some private retirement compensation policies. The Commission did not study changes in force structure caused by the change in military compensation. (Ref 20)

The third study was conducted by the Fifth Quadrennial Review of Military Compensation in 1984. This study completed a rigorous analysis of the military retirement system, concentrating on efforts to improve force structure. The analysis generated 32 findings and 19 recommendations. The study recommended against a defined contribution plan. (Ref. 6, p. IV-33)

Chapter IV **PRIVATE SECTOR RETIREMENT OPTIONS**

This chapter will explain what is meant by the privatization of the military retirement system. A detailed description of popular corporate pension plans such as defined contribution plans, profit sharing plans, and defined benefit plans will be presented. The tremendous popularity of 401(k) plans and the shift from corporate pension plans to salary reduction plans will be discussed.

Chapter V **THE PROPOSAL**

This chapter proposes to replace the current military retirement with a 401(k) plan. The costs and logistics

associated with setting up and maintaining a large privatized retirement system will be shown as well as the financial benefits to the individual. The benefits and drawbacks of adopting a 401(k) retirement plan to the military and the individual service member will be addressed.

Chapter VI RETIREMENT COMPENSATION AND FORCE MANAGEMENT

The relationship between retirement compensation and retention will be examined and criticism of the current twenty year retirement system will be addressed. The effect of the adoption of a privatized military retirement system on force structure will be discussed.

Privatizing the military retirement system will also present problems for the management of the Military Retirement Fund (MRF). Several options for dealing with this fund will be examined. These options will include grandfathering the current retirement system or allocating the entire MRF, based on longevity or historical accrual rates, to all individuals within the military.

Chapter VII CONCLUSIONS AND RECOMMENDATIONS

This chapter will summarize the thesis and present the major conclusions. A concise presentation of the benefits,

cost and problems with privatizing the military retirement system will be addressed.

II. BACKGROUND AND EVOLUTION OF MILITARY RETIREMENT

A. INTRODUCTION

Understanding the origins and evolution of the military retirement system is essential to placing the retirement system in its current context. This chapter will explore the origins of and major legislative changes to the military retirement system. The current military retirement system will be described as well as congressional perceptions and recently proposed legislation affecting funding for military retirement.

B. EVOLUTION OF MILITARY RETIREMENT

1. 1855 - 1984

The origins of the military retirement system can be traced back to an 1855 statute that provided for the compulsory retirement of certain Navy officers. The statute gave the Secretary of the Navy the authority to involuntarily separate naval officers who were determined to be incapable of performing their duty through no fault of their own. Usually officers were separated due to age or disability and were given either leave of absence pay (75 percent of sea duty pay) or furlough pay (50 percent of leave of absence pay). (Ref 10, pp. 371-372)

Voluntary non-disability retirement was first established on August 3, 1861 for regular officers of all branches with greater than 40 years of service. Two other

laws passed in 1861 and 1862 broadened military retirement to include involuntary non-disability retirement for officers from all branches of the military with greater than 45 years of service. Additionally, involuntary separation was set at age 62 for all services. (Ref 10, p. 372)

Several other minor modifications to military retirement were effected between 1870 and 1899 and are summarized below. (Ref 10, p. 372)

- Retired pay compensation was based on a newly created active duty pay system.
- Army and Marine Corps officers were authorized to voluntarily retire with 30 years of active service.
- Mandatory retirement for all officers was raised to age 64.

In 1899, the military retirement system was modified again to improve promotional opportunities within the Navy. This was the first time that military retirement was used specifically to effect force composition. Under this system, officers of the ranks of Lieutenant through Captain could request voluntary separation regardless of age or length of service. The names of the volunteers were put on a waiting list and, if a specified number of vacancies were not opened by normal attrition, these officers were retired early. (Ref 10, p. 373)

The Act of August 29, 1916 introduced two new ideas to military nondisability compensation and established the basis for the current retirement system. The first was to implement an up-or-out philosophy; the second was to create a formula to calculate military retirement pay that remained in effect until 1980. The monthly formula to calculate retired pay was established as final monthly basic pay multiplied by 2.5 percent for each year of service, not to exceed 75 percent. (Ref 10, p. 373)

From 1922 to 1984, several minor or temporary legislative changes were enacted. (Ref 10, pp. 373 - 378, Ref 6, pp. VII-12 to VII-17)

- The retirement system was twice used by the Army to effect a reduction in strength. Temporary early retirement for Army officers was authorized to reduce an excessive officer population in the middle ranks. Officers with as little as 10 years of active duty were chosen to retire and received the standard formula to calculate retirement pay. (Act of June 30, 1922, Act of July 31, 1935)
- Establishment of the voluntary retirement age at twenty years in service. (1938 Navy, 1948 Army and Air Force)
- Mandatory retirement was lowered to 62 from 64 (1946)

- Reserve and National Guard personnel were added to the retirement system.
- Retired pay adjustment procedures were converted to a new COLA system.
- A unified retirement authority for all military services was established. (Defense Officer Personnel Management Act of 1980)
- As part of an effort to decrease retirement costs, the "High Three Average" for calculating retirees' pay was adopted. The average of the service member's highest three years of basic pay was used to calculate the monthly pension instead of using final basic pay. (Department of Defense Authorization Act of 1981)

2. 1984 - Present

The Defense Authorization Act of 1984 adopted accrual based accounting and created the Military Retirement Fund. The Military Retirement Fund was created to provide a means for Congress to budget for future retirement costs associated with current manpower decisions. Adopting accrual based accounting allowed future retirement outlays to be recognized as a future liability and thus the total cost of current manpower decisions was evident.

This Act also made three other changes to the retirement system expressly to reduce the cost of military retirement. These changes included (1) "rounding down" to the next lowest

full month to determine retirement pay multipliers (2) "rounding down" to the next lowest full dollar for monthly retired pay and (3) prohibiting retirees from basing their monthly retired pay on the preceding pay scale as adjusted for inflation. (Ref 10, p. 379)

"Armed with information gained from the new accrual accounting system, Congress next took action to require a \$2.9 billion reduction in nondisability retirement cost accruals for 1986". (Ref 10 p. 380) The Military Retirement Reform Act of 1986 made significant changes to military retirement designed specifically to reduce cost. The same percentage multiplier of 2.5 percent was used to calculate the initial monthly retirement pay. However, the monthly retirement pay was reduced by one percentage point for each year that the member retires with less than 30 years of service. Once a retired member with less than 30 years of service reaches age 62, his retired pay will be increased as if the reduction in the pay multiplier had not been in place.

In several instances over the past decade, Congress has delayed the COLA increase for federal retirees as a means to curtail federal spending. In 1993, the Concurrent Resolution on the Budget for FY 1994 assigned deficit reduction targets for military and civil service retirement costs. The Armed Services Committees achieved the required deficit reduction for the military by delaying COLAs for military retirees in FY 94 through FY 98, saving \$2.358 billion. The Governmental

Affairs Committee met the required deficit reduction for civil servants by also delaying COLAs, saving \$788 million. (Ref 11, p. S8079)

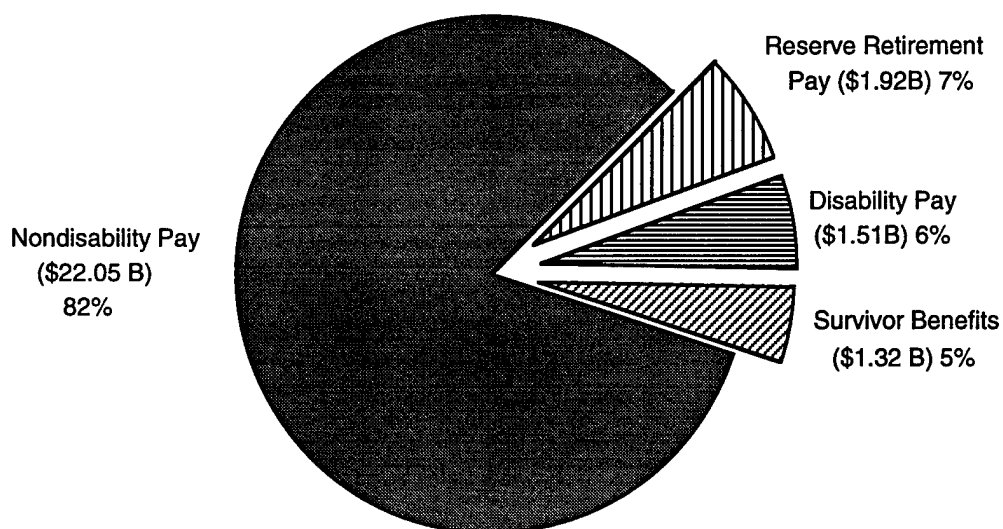
However, since the deficit reduction targets were different for each group and with little coordination between the two committees, the size of the COLA delays for the military and the civil service were different. Consequently, civil servants would obtain their COLAs as much as 9 months earlier than military retirees during the period from FY 94 - FY 98. This created a sense of inequity between the military and civil servant retirees, an issue that remains unresolved today.

C. THE EXISTING MILITARY RETIREMENT SYSTEM

The current military retirement system is a funded, noncontributory defined-benefit plan that includes nondisability retired pay, disability retired pay, retired pay for reserve service and a survivor annuity program. (Ref 8 p. 1) The breakdown of payments for each category is shown in Figure 2.1.

The system provides benefits for members of the Army, Navy, Marine Corps and Air Force. However, most of the specifications also apply to the retirement systems of the Coast Guard, the Commissioned Corps of the Public Health Service and the Commissioned Corps of the National Oceanic and Atmospheric Administration. (Ref 8 p. 1)

Breakdown of Payments Within the
Military Retirement Fund, FY 1994
(dollars in billions)
Total = \$26.8



Source: Statistical Report on the Military
Retirement System, Department of Defense, 1994

Figure 2.1

Service members are eligible to receive retirement benefits after twenty years of military service subject to service secretary approval. Successive changes in legislation have created three separate nondisability benefit

formulas to calculate the monthly pension benefit, depending on when the service member initially entered service. The three retirement formulas are outlined below.

1. Members Entering Service Before September 8, 1980

Retirement pay for retirees who entered service prior to September 8, 1980 is calculated by multiplying their final basic pay by 2.5 percent, not to exceed 75 percent. This retirement formula is commonly called "FINAL PAY" because the monthly retirement benefit is calculated using the retiree's last monthly basic pay. Nondisability retirement benefits are received throughout the retiree's lifetime. The retirement pay is adjusted annually by the same percentage change as the Consumer Price Index (CPI). This is commonly referred to as full CPI protection or CPI indexing. (Ref 8 pp. 1-4)

2. Members Entering Service After September 8, 1980

Retirement pay for members who entered service after September 8, 1980 is calculated using a similar formula as above. However, the average of the basic pay for the last three years of the service member's active duty is used instead of the final basic pay. For this reason, this retirement formula is commonly called "HI-3". The retirement

pay is also subject to full CPI protection for these members.
(Ref 8 pp. 1-4)

3. Members Entering Service After August 1, 1986

Retirement pay for members who entered service after August 1, 1986 is calculated identically to the "HI-3" formula except a reduction is applied if the service member retires prior to 30 years of service. The monthly retirement pay is subjected to a penalty of one percentage point for each year of service less than 30 years. At age 62, the retired pay is recomputed without the penalty. This retirement formula is commonly called "REDUX" because the penalty applied reduces monthly retirement pay. The retirement pay is adjusted annually by the CPI minus 1 percent. However, at age 62, the retirement pay is increased by the amount that would have been payable if the full CPI increase had been in effect. Subsequent to this increase, partial indexing resumes at CPI minus 1 percent annually for the rest of the service member's life. (Ref 8 pp. 1-4)

D. THE MILITARY RETIREMENT FUND

The Department of Defense Authorization Act of 1984 (Public Law 98-94) created the Military Retirement Fund as a means to budget for future retirement costs. In addition, the Military Retirement Fund provides benefits for disability pay and survivor benefits. The purpose of the Military

Retirement Fund as laid out by federal statute is shown below.

There is established on the books of the Treasury a fund to be known as the Department of Defense Military Retirement Fund, which shall be administered by the Secretary of the Treasury. The fund shall be used for the accumulation of funds in order to finance on an actuarially sound basis liabilities of the Department of Defense under military retirement and survivor benefit programs.

10 U.S.C. § 1461

Prior to the adoption of accrual based accounting, the military retirement system was a pay-as-you-go system. That is, as retirement liabilities arose, they were funded by current congressional appropriations. The fund and the new accounting system became effective on October 1, 1984. As a result, the previous unfunded future liability accrued before this date, not recognized by the previous accounting system, became evident under the new accrual based accounting.

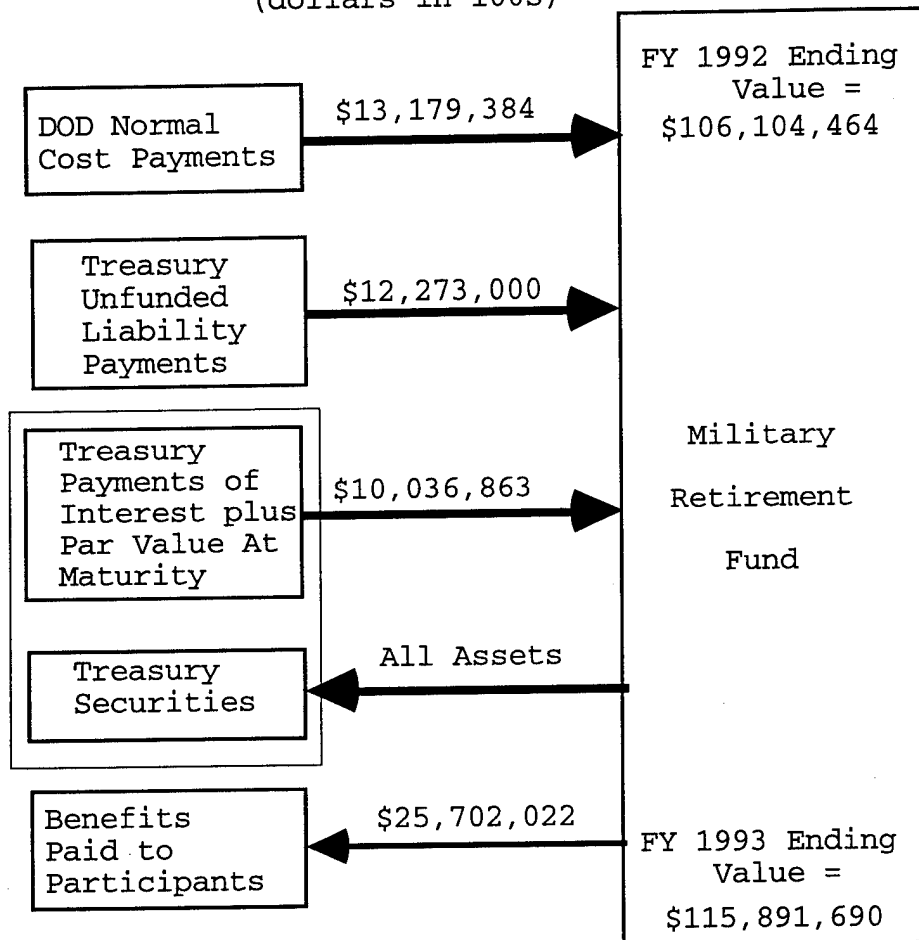
The initial accrued unfunded liability as of September 30, 1984 was \$528.7 billion. (Ref 9, p. 12) The unfunded liability was amortized over a period of 60 years with payments made to the Military Retirement Fund by the Treasury to be completed by the year 2043. Changes in the amount of the unfunded liability "owed" to the Fund may arise because of changes in economic assumptions, changes in the benefit formula for retired pay or variances between actual and expected gains and losses to the fund.

The Military Retirement Fund is a trust fund that invests in special issue government securities bearing an interest rate determined by the Treasury that is reflective of current market conditions. Currently, each security issued to the fund is mirrored by an equivalent Treasury security issued to the public that has an identical maturity date and coupon rate. The securities held by the Fund can be redeemed by the Fund manager at current market value to meet present cash flow needs. (Ref 9 p. 5)

The fund is financed from three sources as shown in Figure 2.2 on the following page. The funded portion is financed from the Department of Defense's Military Personnel Account (051). The Secretary of Defense is required to allocate funds to the Military Retirement Fund at the end of each month based on actuarial estimates. (Ref 12 p. 25) The actuarial estimate is based on "normal cost" and is called the "retirement accrual charge". The normal cost is a percent of basic pay necessary to fund future retirement benefits and is shown in Table 2.1.

The normal cost changes over time because of the changes in economic assumptions and changes in retirement benefits. Congress pays for the retirement accrual charge by automatically increasing the Military Personnel Account by the amount necessary to pay for future retirees.

CASH FLOW FOR THE MILITARY RETIREMENT
FUND, FY 1993
(dollars in 100s)



Source: Valuation of the Military Retirement System,
Department of Defense, Office of the Actuary,
1993

Figure 2.2

Table 2.1

NORMAL COST AS A PERCENT OF BASIC PAY, FY 1994

				FY 94
<u>FULL-TIME</u>	<u>FINAL PAY</u>	<u>HI-3</u>	<u>REDUX</u>	<u>WEIGHTED</u>
Nondisability Benefits	40.0%	35.2%	29.8%	34.1%
Disability Benefits	1.3	1.1	1.0	1.1
Survivor Benefits	<u>1.0</u>	<u>0.8</u>	<u>0.7</u>	<u>0.8</u>
Total	42.2%	37.1%	31.5%	36.0%
<u>PART-TIME</u>				
Nondisability Benefits	11.1 %	10.3%	9.3%	10.1%
Disability Benefits	0.0	0.0	0.0	0.0
Survivor Benefits	<u>0.6</u>	<u>0.5</u>	<u>0.4</u>	<u>0.5</u>
Total	11.7%	10.8%	9.8%	10.6%

Source: Valuation of the Military Retirement System,
Department of Defense, Office of the Actuary, 1993

The unfunded liability is financed from the Treasury via the Central Personnel Management Account (805). These amortized payments are transferred to the Military Retirement Fund at the beginning of each fiscal year and will continue until the year 2043.

Adopting accrual based accounting allowed future retirement outlays to be recognized as a future liability and thus the total cost of current manpower decisions was evident. In other words, the Department of Defense had to pay for retirement benefits as they were earned. Thus, any change that decreased retirement benefits of new entrants

would immediately reduce budget authority and federal outlays to the Military Retirement Fund. This would not affect the deficit in the near term because the military retirement fund is funded by intragovernmental transfers; however, it would reduce apparent Defense appropriations. Therefore, Congress could reduce current year Defense appropriations by reducing retirement benefits of new entrants, without affecting current retirees. This provided a less painful alternative for Congress to reduce Defense spending.

E. COST COMPARISONS WITH CIVILIAN COMPENSATION PLANS

Several government and private studies have shown that military retirement compensation far exceeds typical civilian pensions.

In April 1978, the President's Commission on Military Compensation completed a thorough review of the entire structure of military pay, benefits and retirement. Two findings of the Commission relating to military retirement indicated that the cost of the military retirement system was excessive. The Commission found that military retirement, "which allows retirement after 20 years of service at half of basic pay, can no longer be justified, and that compensation should be more cost effective because the nation cannot afford to waste tax payer's dollars". (Ref 13 p. 2)

The Department of Defense conducted its own study on military retirement in 1984. The Fifth Quadrennial Review of

Military Compensation conducted the study, concluding that military retirement costs the government 1.2 to 2.0 times the average of a large sample of private-sector plans. (Ref 6, p. IV-6)

Two years later, in 1986, the General Accounting Office (GAO) conducted a study that compared military compensation with similar civilian jobs in the private sector. The GAO made two significant findings: "Military compensation exceeded the compensation of all civilian workers in the vast majority of our specific comparisons and, military fringe benefits were considerably more generous than civilian benefits." (Ref 5 p. 2).

However, the GAO does point out that military pay may need to be higher because of the different mix of occupations, greater responsibility incurred by military personnel than typical civilian counterparts, and frequent moves that make it difficult for spouses to maintain a career. GAO also asserts that the added danger and the 24 hour a day job liability without extra pay may justify increased salaries.

More recently, on July 10, 1995, the Concord Coalition released its study of federal pensions which compared military and civil service retirement pensions to those in the private sector. (Ref 14 pp. 1-4) The Concord Coalition notes the significant differences in normal cost between private sector retirement plans and military retirement.

Normal cost is an actuarial term and is the usual standard for comparing federal pay and benefits with the private sector. It refers to the flat percentage of pay that would have to be contributed, throughout an employee's work tenure, to cover the cost of that employee's lifetime pension benefits. The employer cost of a typical private-sector pension plan plus Social Security is 12.2 percent of payroll. The normal cost of military pensions is 36.4 percent of payroll. Including the 6.2 percent for Social Security (under which all military personnel are automatically covered) yields a total employer cost for the military retirement package of 42.6 percent of payroll, 3.5 times the equivalent private-sector figure.

However, the Concord Coalition fails to point out that the normal cost the military uses is based on basic pay and not total "payroll". Basic Pay is only a fraction of total active duty compensation and thus is not a reliable basis for comparison. The Department of Defense uses Regular Military Compensation (RMC) to compare military salaries to their typical civilian counterparts. The RMC includes basic pay, quarters allowance (either cash or in kind), subsistence allowance (either cash or in kind), variable housing allowance and the tax advantage associated with the tax exempt status of the allowances.

For a 20 year retiree, basic pay represents approximately 72 percent of RMC, and for a 30 year retiree,

basic pay represents approximately 57 percent of RMC. (Ref 8, p. 6) Therefore the comparable normal cost for a 20 year and 30 year retiree are 26.2 percent and 20.7 percent respectively. The normal cost for military personnel is actually between 1.7 and 2.1 times that of a typical civilian employer's normal cost. These numbers correlate closely with the retirement cost comparison estimates calculated by the QPMC.

Current military retirees are receiving COLAs, although delayed, fully indexed to the CPI. The Concord Coalition points out in its report that only a small fraction of private pensions receive any inflation adjustment, and virtually none receive annual CPI COLAs.

The Concord Coalition also criticizes the military pension system's early retirement ages, which now average 42 for enlisted men and 46 for officers. "Many believe it is a costly and unnecessary waste of skills and training for the typical military pensioner to spend more years collecting benefits (an average of 35 years) than earning them (an average of 22 years)". (Ref 14 p. 3) In comparison, the average retirement age in the private sector is 62.

F. CONGRESS, THE DEFICIT AND MILITARY RETIREMENT

In 1995, the federal debt exceeded 4.8 trillion dollars, approaching 70 percent of Gross Domestic Product for the first time in over 45 years. (Ref 15) The President's FY

1996 budget proposal continues to anticipate chronic budget deficits in the range of 200 billion dollars every year for the foreseeable future. (Ref 15) Subsequently, on June 13, President Clinton submitted a second budget proposal that was claimed to produce a balanced budget by 2005. However, the Congressional Budget Office analyzed the President's plan and reported that a deficit of \$209 billion would still be present in 2005. (Ref 27, pp. 1715 - 1719)

In 1994, the Republicans campaigned on a balanced budget platform as well as many other significant reforms aimed at reducing the scope of the federal government. The election results of November of 1994 overwhelmingly favored Republicans, suggesting public support for deficit reduction. Congressional lawmakers have interpreted the Republican victory as a mandate to balance the federal budget. On July 1, 1995 the House and Senate adopted a Budget Resolution calling for the elimination of the deficit in seven years at an estimated reduction in spending of over 1.1 trillion dollars. (Ref 21 p. 1899)

Since 1980, legislative changes to military retirement have established a trend by Congress to reduce military retirement benefits. In the context of the current budgetary climate and the federal deficit, this trend appears to be accelerating. For example, former Congressman Timothy J. Penny had this observation regarding COLAs. (Ref 18)

I think COLAs are bad public policy. When you automatically inflation-adjust the budget and guarantee half the budget a cost of living increase, it is a formula for a growing deficit. It is unsustainable.

In a recent letter to constituents, Senator Allen Simpson stated his view of military retirement: "This is an extraordinarily generous system by any standard".
(Ref 16)

Senator Judd Gregg headed up a task force in 1995 that recommended three caps on annual cost-of-living adjustments to military retirees and active duty service members. The first cap would reduce the COLA for active duty service members to the CPI minus .5 percent reflecting the growing belief that the CPI is overstated. The second would eliminate any COLA for military retirees under the age of 62. This COLA cap would cut retirement earnings by as much as 30 percent over a retiree's lifetime. The third cap would apply the COLA increase only to the first \$13,800 of annual retired pay. This maximum amount was picked because it is the maximum amount that can be received in Social Security benefits. (Ref 17)

The Chairman of the House Budget Committee, John Kasich, has similar views on military retirement. Although his legislative intentions are not known, he has in past years criticized military retirement as too generous and

recommended changes similar to those of Senator Gregg's task force. (Ref 17)

The unfunded liability in the Military Retirement Fund is also creating congressional concern. Then Representative Timothy J. Penny is quoted in 1993 as saying "We have got a real nightmare facing us in not too many years down the road as we try to finance a very expensive retirement program when there is really no money coming in to pay the bills." (Ref 17) In November of 1993, a lead article on the front page of the Washington Post titled "Government Has Massive Pension Fund Shortfall" clearly indicates that the unfunded liability is attracting significant attention. (Ref 18)

Regarding this unfunded liability, Dallas Salisbury, president of Employee Benefit Research Institute, had this observation: (Ref 18)

It is huge. There is a burden being left on future taxpayers. The unfunded liabilities are setting up a situation of jeopardy for the federal retiree. I'm not afraid the government won't be here to make the payment. I'm afraid they won't make the payment even though they are here.

Congressional perception has translated into several congressional bills. In Response to Senator Gregg's task force's recommendation, Senator Kerrey and Senator Simpson have sponsored three bills that will reduce military retirement benefits. Senate Bill 820 will reduce the accrual rate used to calculate pensions to 2 percent per year

regardless of how many years of service an individual may have. Currently, the accrual rate is 2.5 percent for each year of service, reduced by one percentage point for each year served less than 30 years of service. This bill would be retroactive to any member entering service after July 31, 1986. Senate Bill 821 focuses on a downward adjustment in the Consumer Price Index (CPI). The CPI, used to calculate the COLAs of military retirees, is perceived to overstate true inflation by one to two percentage points. Senate Bill 822 would impose limits on the COLAs of all military retirees except the thirty percent who receive the smallest pensions. These retirees would continue to receive their full COLA increase. (Ref 16)

G. SUMMARY

The legislative history of military retirement clearly shows that military retirement has been used as a force management tool. However, since 1981, the predominant legislative changes to military retirement have been to reduce the costs and the benefits of the system.

The creation of the Military Retirement Fund in 1984 has made the cost of retirement compensation more visible in the federal budgetary process. The ability of Congress to reduce current year Defense appropriations by reducing retirement benefits of new entrants provides a less painful alternative for Congress to reduce Defense spending.

The current austere budgetary climate coupled with past studies showing that military retirement is overly generous and the sheer magnitude of the unfunded liability suggest continued pressure to reduce future retirement benefits.

III. STUDIES OF ALTERNATE RETIREMENT SYSTEMS

A. INTRODUCTION

Extensive analysis has been undertaken and effort expended in studying military retirement compensation policies over the past 45 years. Numerous changes to the military retirement system have been recommended. Emphasis has been given to changing military retirement to a more flexible force management tool as well as reducing the cost of retirement benefits. Several of the recommended changes have been sweeping while others have only been minor adjustments. However, the majority of the recommendations from these studies has not been acted upon and consequently the military retirement system has remained fundamentally unchanged since the end of World War II.

B. PURPOSE OF MILITARY RETIREMENT

The purpose of military retirement must be clearly understood before any attempt is made to alter it. The purpose and principles of military retirement have been evolving since the Hook Commission completed the first comprehensive analysis of military retirement in 1948. The best current statement of the goals of military retirement, as outlined in the Military Compensation Background Papers, is presented below.

1. The choice of career service in the armed forces should be competitive with reasonably available alternatives.
2. Promotion opportunities must be open for young and able members.
3. Some measure of economic security must be available to members after retirement from career military service.
4. A pool of experienced personnel must be maintained who would be subject to recall to active duty during time of war or national emergency. (Ref 10 p. 371)

These goals clearly indicate that military retirement serves as both a force management tool and a retirement plan that is competitive with typical civilian plans which provide economic security to employees.

The President's Commission on Military Compensation in 1978, the Grace Commission in 1983 and The Fifth Quadrennial Review of Military Compensation in 1984 are significant studies that address the major issues associated with reforming military retirement. The significant findings and recommendations of these studies are presented below.

C. PRESIDENT'S COMMISSION ON MILITARY COMPENSATION

The President's Commission on Military Compensation (PCMC) was formed in 1977 by President Jimmy Carter,

following the shift to an All Volunteer Force (AVF). The purpose of the Commission was to complete a comprehensive analysis on the entire military pay structure. The President specifically asked the Commission to propose a single integrated long term compensation plan that would be fair to the service members as well as the taxpayers. Implicit in this charge was the expectation that the Commission's report would not become a long series of unheeded studies. (Ref 13, p. 8)

The PCMC, although committed to studying all forms of military compensation, allocated the majority of its efforts to military retirement. The Commission regarded retirement compensation as the key issue because of the growing cost of retirement benefits and the amount of attention the system was receiving from Congress. The philosophy of the PCMC was to modify military compensation to be more cost effective, flexible and fair.

Under this philosophy, the Commission made one general, but significant finding relative to military retirement and recommended several relevant changes. They concluded that the military retirement program, which allows retirement after 20 years of service at half of basic pay, can no longer be justified. (Ref 13 p. 2) The Commission recommended establishing a new noncontributory retirement plan consisting of three parts: a retirement annuity to provide for old-age needs; a trust fund to provide deferred compensation; and

along with the trust fund, severance pay to assist former service members in their adjustments to civilian life.

The recommended elements for the retirement annuities to meet old age income needs are outlined below.

- a. Eligibility for a deferred annuity be established at age 55, 60 or 62 depending on years of service, starting at 10 years.
- b. Annuity levels should be similar to those earned in the federal civil service employment.
- c. Social Security benefits should be partially integrated with retirement annuities.
- d. Retirement annuities should have inflation protection.
- e. Health care, exchange, and commissary benefits for most annuitants should continue.
- f. Military and civil service retirement plans should be fully integrated; no dual compensation. (Ref 13 p. 3)

A deferred compensation trust fund was recommended to be created to increase retention and to provide income for service members with 10 or more years of service. The Commission recommended government-paid credits after 5 years of service and withdrawal options consistent with the primary purpose of deferred compensation, in order to aid service members in their transition to civilian life after 10 or more years of active duty. (Ref 13 p. 3)

The PCMC essentially argued that twenty year vesting is unfair to the majority of service members who do not serve in the military for twenty years. Consequently, 10 year vesting was proposed to allow members with between 10 and 20 years of service to obtain a deferred annuity. Under this plan, DOD would make annual payments to a trust fund for each service member based on base pay and years of service. The trust fund would be invested in interest bearing government securities. When the service member left military service, the accrued retirement benefit in the trust fund could be withdrawn as a lump sum or rolled over to another retirement plan. (Ref 19, p. 33)

The PCMC argued that offering cash benefits to service members with between 10 and 20 years of service would provide DOD with a more flexible and rational force management tool. (Ref 19, p. 33)

The primary criticism of the PCMC was that its goals for military retirement were inconsistent with the stated goals of the Department of Defense. The PCMC favored a complicated early withdrawal system which made it difficult to encourage separation from service at the proper point. The proposals of the PCMC were modified by DOD and submitted to Congress as the Uniformed Services Retirement Benefit Act (USRBA) in 1979, but Congress did not act upon it.

D. GRACE COMMISSION

A second significant change to military retirement was proposed by the President's Private Sector Survey (PPSS) in 1984, better known as the Grace Commission. President Reagan created the PPSS as a broad based attempt to reduce costs and inefficiencies in the federal government. The PPSS generated over 2400 recommendations for changes in federal government programs at an estimated cost savings of \$424.4 billion over three years. The scope of the study covered 784 issues in government, of which military retirement was one.

The PPSS sought to reduce costs and inefficiencies in the federal government by applying management concepts widely used in corporate America.

1. Proposals

- a. Service members that complete more than 20 years of service would only receive full and unreduced annuities at age 62.
- b. The formula for calculating military retirement pay would use a reduced multiplier of 1.6 percent of Basic Military Compensation (BMC). BMC is equivalent to basic pay, allowances for quarters, subsistence and the tax advantages that arise from these allowances, which is about the equivalent of 2.1 percent of basic pay.

- c. Retirement pay would be reduced by the share of Social Security that was earned during military service.
- d. COLAs for retirees would be reduced to the lower of the percentage of the CPI or the percentage change in BMC. After the retiree reaches his 62nd birthday and becomes eligible for Social Security, the COLA increase would be reduced to only one third of the CPI increase.
- e. Surprisingly, the PPSS also recommended increasing benefits for service members leaving service with between 10 and 19 years of service. The PPSS argued that the vesting time frame be reduced for service members with between 10 and 19 years of service. However, annuities would begin only after age 62. (Ref. 20, p. 35)

2. Criticisms

The Fifth Quadrennial Review of Military Compensation (QRMC), General Accounting Office (GAO) and the Congressional Budget Office (CBO) all reviewed the recommendations of the Grace Commission. The consensus was that the Grace Commission did not adequately study or anticipate the effect of the changes to the military retirement system on retention and thus, force structure. The Grace Commission focused

primarily on cost reduction and ignored much of the impact of their recommendations. (Ref. 20, p. 38, Ref 6, p. IV-36)

E. FIFTH QUADRENNIAL REVIEW OF MILITARY COMPENSATION

A thorough review of the principles and purposes of military compensation was mandated by Section 100(b) of Title 37, United States Code and was to be presented to Congress every four years. (Ref 6, p. I-1) The Fifth Quadrennial Review of Military Compensation (QRMC) conducted one of the most comprehensive and rigorous studies on military retirement in 1984, concentrating on efforts to improve force structure. The analysis generated 32 findings and 19 recommendations. Those which are significant and relevant are presented below.

1. Significant Findings

- a. The Military Retirement System is not an old-age pension but is a force management tool.
- b. The current retirement system is a powerful career incentive exerting its influence at the 8-12 year point.
- c. The enlisted career force is more sensitive to retired pay changes than the officer force.
- d. The current retirement system can be restructured to increase force readiness at less cost.

- e. Reducing retirement benefits without increasing compensation will negatively impact the career force, and thus, reduce mission readiness.
- f. Earlier vesting for a deferred benefit costs more and is of no value to mission readiness. The earlier vesting issue is one of equity.
- g. A contributory retirement system would have to be offset by an equal or greater percentage of the member's contribution.
- h. Only those who separate early stand to gain from a contributory system.
- i. Military retirement costs are 1.2 to 2.0 times the average of large private sector plans.

The QRMC also produced four primary alternatives for restructuring and strengthening the current military retirement system. These alternatives concentrated primarily on reallocating retirement dollars to improve force structure. (Ref 6, p. IV-29)

2. Significant Recommendations

The findings of the QRMC translated into several recommendations. The QRMC maintained that the purpose of the military retirement system should not be changed. The military retirement system does not have the same objectives as civilian retirement plans.

The impact on force structure should be fully analyzed before any attempt is made to change military retirement. This recommendation is in response to the sweeping reforms recommended by the Grace Commission without a concomitant analysis of the effects on force structure. (Ref 6, p. IV-35)

The QRMC also went against the recommendations of the PCMC which argued that vesting times be reduced from twenty years to ten years. The QRMC conceded that reducing vesting times for service members was an issue of fairness but it would cost more and does not contribute to mission readiness. (Ref 6, p. IV-35)

The system should remain non-contributory for the service member. This recommendation echoed several other studies dating as far back as 1961. The QRMC argued that the government would not gain by adopting a contributory policy since it would only be supplementing a forced savings plan for members leaving the military. Only the service members who leave service and withdraw their accrued benefits upon separation would gain. There would be no benefit to mission readiness. (Ref 6, p. IV-35)

No explicit integration with Social Security should be undertaken. The QRMC asserts that "Social Security benefits have been, and are expected to be, less than for comparable private-sector earnings as a result of contribution only on basic pay rather than basic military compensation (BMC)." (Ref 6, p. IV-33) This establishes an implicit, partial

integration with Social Security. In addition, enlisted members would be impacted to a greater extent if Social Security is explicitly integrated with the military retirement system. (Ref 6, p. IV-33)

The QRMC concentrated primarily on preserving or expanding the force management objectives of military retirement. Little attention was given to equity, reducing the cost or increasing the competitiveness of military retirement with civilian compensation plans. However, military retirement cost reductions realized through the Military Retirement Reform Act of 1986 were a direct result of some of the recommendations of the Fifth QRMC. (Ref 20, p. 36)

F. SUMMARY

Despite the influences and recommendations of the many studies of military retirement, the system has remained fundamentally unchanged since 1948. The majority of studies have been narrowly focused either on cost reduction, force management or fairness and have seemingly ignored other possibilities for accomplishing the military's retirement objectives while meeting all of these goals.

There have been no significant studies of or proposals for privatizing military retirement. However, many concepts addressed in these three studies are relevant to a privatized retirement plan and may be integrated into a single

retirement system which meets the stated goals of military retirement.

IV. PRIVATE SECTOR RETIREMENT OPTIONS

A. INTRODUCTION

The origin of private retirement plans dates back to the American Express Company which, in 1875, offered the first formal pension plan provided by an employer. (Ref 22, p. 69) The historical legislative changes in private pension plans are almost as long as those of military retirement. However, the passage of the Employee Retirement Income Security Act (ERISA) in 1974 stands out as the most significant. The goals of ERISA have been to (1) decrease the pension loss associated with job changes, (2) ensure that funding is adequate, (3) ensure that workers receive sufficient information to evaluate their plan, and (4) provide for new types of tax qualified defined contribution plans. (Ref 22, p. 88)

Ironically, it wasn't until 1984 that the federal government imposed the same standard for full funding of retirement benefits to the military that it required of private pensions since 1974. No effort has been made in the military retirement system to decrease the pension loss associated with job changes or to ensure that workers receive sufficient information to evaluate their plan. This reflects the different goals associated with military retirement.

The passage of ERISA had an unintended side effect on the profile of pensions in the United States. The evolving

regulations accelerated by ERISA significantly increased the employer cost of defined benefit plans. (Ref 22, p. 115) As a result, employers and employees began to negotiate defined contribution plans. This established a trend away from defined benefit plans and towards defined contribution plans. Further tax and regulatory legislation in the 1980's that favored defined contribution plans accelerated this trend.

B. RETIREMENT PLANS

1. Defined Benefit Plans

Defined benefit plans have been the traditional retirement pension offered by many private companies. The benefits that a retiree receives from the company are determined in advance and are not dependent on the performance of the pension investment. The actuarial accrual of retirement benefits is dependent on a previously defined formula which differs widely among individual companies.

The company is responsible for funding the previously determined retirement benefits to the pension account. The risk to the employee, largely centers around the long term financial health of the company. If a company fails financially, it may be unable to pay the retirement benefits promised to its employees. The retirement annuity payments usually continue until death regardless of life expectancy of the recipient. The pension payments stop at time of death unless a survivor benefit plan is provided. The current

military retirement system is a defined benefit plan. (Ref 22, pp. 19-32)

2. Defined Contribution Plans

Defined contribution plans are retirement plans where the employer contributes a portion of the employee's salary to a pension account. The employee can voluntarily add additional funds, tax deferred, into the account. The pension benefit is dependent on the cumulative lifetime contributions to the account and the rate of return of the investment. Other than the employer's contribution, the employer has no further financial liability once the contributions have been made. Defined contribution plans include profit sharing plans, stock bonus plans and thrift savings plans. (Ref 22, pp. 9-18) A defined contribution plan that has applicability to a government sponsored pension is a thrift savings plan which is presented below.

a. Thrift Savings Plans

Although not widely used in the private sector, these plans have been available to federal civilian employees since 1987. Participants who are covered under the Federal Employee Retirement System (FERS) can elect to defer up to 10 percent of their basic pay which is placed in an investment account. In addition, the federal government will match the employee contributions dollar for dollar up to 5 percent of

basic pay. However, even if the employee elects not to contribute any of his salary, the government will still contribute an automatic 1 percent to the employee's account. The employee benefits from the tax deferred income and any appreciation in the account over time. The matching funds from the government along with the tax deferred income provide a powerful incentive for employees to contribute to their account. (Ref 23, p. 44)

Another key feature of the thrift savings plan is that employees can borrow against the account for the purchase of a home, medical expenses, education, or financial hardship. The account can be invested in any of three funds specializing in government securities, stocks or fixed income securities. (Ref 23 p. 44)

Upon termination of employment, the employee can rollover this account into an Individual Retirement Account (IRA), the new employer's retirement plan or the money can be left in the account and used as an annuity. This provides a portable retirement plan that can be transferred to the new place of employment.

3. Individual Retirement Accounts

Individual Retirement Accounts (IRA) are investment vehicles that allow individuals to contribute up to \$2000 of tax deferred income each year. However, if an individual is covered by a retirement plan and has an Adjusted Gross Income

over a specified amount, the \$2000 cannot be tax deferred but can still be contributed to the account. The IRA can be placed in an almost unlimited number of investment choices including mutual funds, stocks, bonds or cash and any income earned continues to grow tax deferred. The \$2000 of deferred income is subject to the FICA tax since the tax deduction occurs after the employee receives the income. (Ref 3, pp. 659-661) When the individual reaches age 59 1/2, the money can be withdrawn without penalty and any amount that was tax deferred is now taxed at the time of withdrawal.

Although only 17 percent of all military people eventually receive a military pension, the IRS considers every military member to be covered by a retirement plan. Thus, single service members with an Adjusted Gross Income over \$25,000 or married with over \$40,000 cannot tax defer the entire \$2000 of income. The IRA deduction is completely eliminated for Adjusted Gross Incomes of over \$35,000 for single taxpayers and \$50,000 for married taxpayers. (Ref 24, p. 145)

4. Salary Reduction Plans

Salary reduction plans are similar to the thrift savings plan, although different IRS rules govern each type of investment plan. The two most common salary reduction plans are the 401(k) and 403(b).

a. 401(k)s

401(k) plans are voluntary retirement plans offered to many employees in the private sector. In this plan, employees can elect to defer a percentage of their pretax salary, not to exceed \$9,240 a year (1994 limit). (Ref 24, p. 131) Typically the employer will match a portion of the member's contribution up to about 5 percent of the base salary. The combined total contribution from an employee and employer cannot exceed 25 percent of the employee's salary or \$30,000, whichever is less. (Ref 24, p. 132) The employee usually has a wide variety of investment options to choose from, including stock and bond mutual funds as well as more conservative money market accounts. The employee has the flexibility to contribute to several investments simultaneously or change the asset allocation between investments as the employee's needs or investment strategy changes.

The employee's contribution (unlike an IRA) is deferred compensation and therefore does not appear on the W-2 form. Consequently, the contribution escapes federal, and usually state, Social Security and other taxes. (Ref 3, p. 636)

Employees are typically eligible to contribute to a 401(k) within 1 year of employment. If the funds are withdrawn before age 59 1/2 without being rolled over into another tax deferred retirement account, penalties are imposed on the withdrawal as high as 10 percent and the

amount withdrawn is also subject to federal and state income taxes. (Ref 24, p. 131) It is also possible for employees to borrow from their 401(k) savings without penalties if certain restrictions are met such as severe financial hardship.

The growth of 401(k) plans in corporate America has been tremendous. Fully 96 percent of companies with greater than 5000 employees offer 401(k) plans. While the incidence of 401(k) plans among companies with less than 100 employees is only 12 percent, 90,000 are expected to start 401(k) plans over the next 5 years. (Ref 2, p. 38)

Jonathan D. Pond, one of America's most respected financial planners, considers 401(k) plans "the most attractive tax advantaged investment vehicles your money can buy". (Ref 3, p. 635)

b. 403(b)s

The 403(b) or Tax Sheltered Annuity, is the non-profit private sector's answer to the 401(k). Similar to a 401(k), the employee contributes a certain percentage of his salary each month to an investment vehicle of his choosing. Ordinarily, the employee contribution limit is \$9500 annually or 20 percent of the base salary, whichever is less. (Ref 24, p. 132) Usually matching funds are also contributed to the employee's account by the employer. Typically between 3 and 25 stock and bond mutual funds are available to choose from. Unlike a 401(k), a 403(b) is a contract that an employee

signs with an investment company. The contract is replete with restrictions and significantly reduces the flexibility and control of the assets by the employee.

Large cash penalties are imposed if the employee chooses to roll over or transfer the funds to another retirement account within a specified period of time. These penalties can be as high as 7 percent of the total assets but are gradually reduced to zero percent over a period of 5 to 7 years. Limitations are also imposed on the transfer of assets between investments within the 403(b) account, which reduces the flexibility of the investment strategy. As with a 401(k), severe tax penalties are imposed if the funds are withdrawn before age 59 1/2. (Ref 3, pp. 645-649)

Salary reduction plans have shifted more responsibility for retirement planning from the corporations to the individual. 401(k) and 403(b) plans offer a wide array of investment vehicles to choose from and also require a dedicated commitment by employees to contribute to and actively manage their retirement assets. Employers have responded by providing educational seminars that assist employees in making retirement decisions.

C. SUMMARY

Private Corporations are increasingly relying on defined contribution and salary reduction plans to provide retirement benefits for their employees. This trend is largely the

result of a changing regulatory environment which has made defined benefit plans more costly to corporations.

A 401(k) plan represents a portable retirement plan that can follow an individual through the many job changes which occur throughout a worker's life. In addition, the prevalence and ease of access to mutual funds have made these investment vehicles attractive to the average employee. Employees are given tax incentives to contribute to the retirement plan, therefore reducing the cost to employers. As a result, over 96 percent of corporations with over 5000 employees have adopted 401(k) plans. (Ref. 2, p. 38)

The trend towards 401(k) plans and away from defined benefit plans has changed the financial risk to the employee. The guarantee of receiving benefits from defined benefit plans was previously dependent on the long term financial health of only one company. 401(k) plans, through the use of mutual funds, can now spread this risk across many companies, industries and even countries instead of just one corporation.

Salary reduction or defined contribution plans require the employee to take a more active role in providing for his retirement. Through employee contributions and investment choices, the individual has been forced to actively participate in saving for retirement. Corporations have dealt with this increased employee responsibility by

providing investment and retirement planning seminars as well as educational literature to their employees.

V. THE PROPOSAL

A. INTRODUCTION

This chapter compares the normal cost of two options of a privatized 401(k) plan for the military to the current retirement system. These two options establish normal cost boundaries for a privatized retirement plan. A 401(k) plan which has a normal cost between these two options is then presented as the preferred option for the military.

The first option is a budget neutral 401(k) plan that uses the same allocation rate, or normal cost, as the current retirement system which would be applied to every service member's 401(k) account. This option is used to establish an upper bound on the cost of implementing a privatized retirement system. The second plan, which establishes a lower bound, is modeled after a 401(k) plan found in a typical American corporation. In this case, the normal cost for the government is lowered to 5 percent of basic pay. The measure of cost in each case is based on the normal cost or the government's contribution to the service member's retirement as a percent of base pay.

The proposed privatized retirement plan is a contributory 401(k) type of plan for the military. The normal cost of this plan is 10 percent of base pay, which falls between option 1 and option 2 above. The member contribution is set at 10 percent. This proposal is one of many variations that could be considered by policy makers.

The allocation between the service member's contribution and government matching funds to the 401(k) account can be altered to meet the needs of the military or the individual.

Finally, the chapter addresses several benefits and drawbacks of adopting a 401(k) plan as well as the annual maintenance fees associated with a 401(k) and the phasing out of the Military Retirement Fund.

B. COSTS COMPARISONS OF MILITARY RETIREMENT PLANS

1. Current Military Retirement System

The normal cost for nondisability retirement benefits ranges from 29.8 percent of basic pay for REDUX to 40.0 percent of basic pay for the FINAL PAY formula. Although, the normal cost or accrual rate is applied to every service member, they are based, in part, on accruing retirement benefits for only the seventeen percent of service members who actually reach the twenty year point and retire. Retirement benefits that are accrued are deposited into the Military Retirement Fund.

In addition to this accrual accounting system, the Department of Defense also calculates the cost and benefit of the retirement system by determining the theoretical annual deposits necessary for each eligible retired service member to accumulate a lump sum equivalent. Tables 5.1 and 5.2 display retirement benefits and deposits necessary under

FINAL PAY for officer and enlisted ranks respectively retiring in 1994.

Table 5.1

Military Retired Pay, Lump Sum and Deposits (Officers)

Grade	Title	Monthly Retired Pay	Lump Sum-Equivalent	Monthly Deposit	Annual Deposits
O-10	Admiral	\$4,508	\$1,249,290	\$2,524	\$30,293
O-9	Vice Admiral	\$3,958	\$1,096,870	\$2,216	\$26,597
O-8	Rear Admiral (UH)	\$3,750	\$1,039,228	\$2,100	\$25,200
O-7	Rear Admiral (LH)	\$3,391	\$939,739	\$1,899	\$22,787
O-6	Captain	\$2,596	\$719,423	\$1,454	\$17,445
O-5	Commander	\$2,349	\$650,972	\$1,315	\$15,785

Table 5.2

Military Retired Pay, Lump Sum and Deposits (Enlisted)

Grade	Title	Monthly Retired Pay	Lump Sum-Equivalent	Monthly Deposit	Annual Deposits
E-9	Master CPO	\$1,427	\$388,004	\$784	\$9,408
E-8	Senior CPO	\$1,251	\$340,149	\$687	\$8,248
E-7	CPO	\$1,104	\$300,180	\$607	\$7,279
E-6	First Class PO	\$967	\$262,929	\$531	\$6,376

Data Source for Tables 5.1 and 5.2: Department of Defense, Office of the Actuary, DOD Statistical Report on the Military Retirement System, FY 1994.

Since the lump sum equivalents shown in these tables are based on FINAL pay formulas, these values are greater than if a similar calculation were completed based on REDUX formulas.

The lump sum equivalent shown in Tables 5.1 and 5.2 is the equivalent amount of money needed at the time of retirement to provide a lifetime annuity for the service member. The lump sum equivalents provide a "target" or bench mark to compare the accrued benefits of any privatized retirement system. The monthly or annual deposits assume an investment return in the Military Retirement Fund of 6.75 percent. (Ref 8, p. 285)

The Military Retirement Fund invests in conservative government securities and consequently yields a lower return than riskier investments such as stocks. Many private retirement plans such as 401(k)s allow employees to invest in a wide variety of investments. Most financial planners advise their clients that retirement savings for young people should be primarily invested in more aggressive investment vehicles such as stocks or stock mutual funds. One financial planner remarks "stocks have consistently proven to be the best inflation-beating investment around". (Ref 3, p. 497) Stocks have returned on average 11.2 percent over the past 20 years, significantly outperforming the 7.7 percent return of

U. S. Treasury securities over the same period. (Ref 3, p. 431)

2. Option 1: Non-contributory 401(k) - 29.8% Government Matching.

Option 1 is a budget neutral noncontributory 401(k) plan described here to establish an upper bound on the normal cost, or government contribution, to a 401(k) account for the military. The government's contribution remains at 29.8 percent of basic pay but is applied to every service member's 401(k) account instead of the Military Retirement Fund. The 29.8 percent accrual rate is based on the identical normal cost under the current REDUX retirement formula. The total outlays for military retirement would not change since the normal cost per service member is held constant. Table 5.3 shows the retirement accrual for a typical officer retiring after 20 years of service, under this option.

The 401(k) account is assumed to be invested in a diversified stock mutual fund yielding 11.2 percent, the average return over the past 20 years. After twenty years of service, a typical officer can expect to have accrued \$663,587 in a retirement account. This option accrues benefits proportional to a member's base pay and covers all service members with the identical cost to the government as the current plan. The data in Tables 5.3 and 5.4 do not take inflation into consideration and therefore no COLAs are applied to base pay over time.

Table 5.3
401(k) Savings Plan with 29.8 Percent Matching
(Budget Neutral)

Year	Rank	Base Pay (monthly)	Member Contrib.	Government Contribution (monthly)	Total (Monthly)	Annual Cumulative (Compounded at 11.2%)
1	0-1	\$1636.20	0	\$487.59	\$487.59	\$5,851
2	0-1	\$1636.20	0	\$487.59	\$487.59	\$12,357
3	0-2	\$2058.00	0	\$613.28	\$613.28	\$21,101
4	0-2	\$2556.00	0	\$761.69	\$761.69	\$32,604
5	0-3	\$2858.10	0	\$851.71	\$851.71	\$46,477
6	0-3	\$2994.90	0	\$892.48	\$892.48	\$62,392
7	0-3	\$2994.90	0	\$892.48	\$892.48	\$80,089
8	0-3	\$3102.30	0	\$924.49	\$924.49	\$100,153
9	0-3	\$3102.30	0	\$924.49	\$924.49	\$122,464
10	0-3	\$3270.30	0	\$975.55	\$975.55	\$147,875
11	0-4	\$3432.00	0	\$1022.74	\$1022.74	\$176,710
12	0-4	\$3624.90	0	\$1080.22	\$1080.22	\$209,464
13	0-4	\$3624.90	0	\$1080.22	\$1080.22	\$245,886
14	0-4	\$3790.20	0	\$1129.48	\$1129.48	\$286,979
15	0-4	\$3790.20	0	\$1129.48	\$1129.48	\$332,6745
16	0-4	\$3956.70	0	\$1179.10	\$1179.10	\$384,083
17	0-5	\$4313.10	0	\$1285.30	\$1285.30	\$442,525
18	0-5	\$4560.00	0	\$1358.88	\$1358.88	\$508,394
19	0-5	\$4560.00	0	\$1358.88	\$1358.88	\$581,640
20	0-5	\$4698.60	0	\$1400.18	\$1400.18	\$663,587
	Total	Accrued				\$663,5871

Note: Numerical values may not add up exactly due to rounding

3. Option 2 - Typical civilian 401(k) Plan

Option 2 is modeled after a typical civilian 401(k) plan with a 10 percent member contribution and 5 percent

government matching. The normal cost for the government is reduced from 29.8 percent to 5 percent of base pay. This represents a reduction in government outlays of 83 percent

Table 5.4
401(k) Savings Plan with 5 Percent Matching
& 10 Percent Member Contribution

Year	Rank	Base Pay (monthly)	Member Contrib.	Government Contribution (monthly)	Total (Monthly)	Annual Cumulative (Compounded at 11.2%)
1	0-1	\$1636.20	\$163	\$81	\$245	\$2,945
2	0-1	\$1636.20	\$163	\$81	\$245	\$6,220
3	0-2	\$2058.00	\$205	\$102	\$308	\$10,621
4	0-2	\$2556.00	\$255	\$127	\$383	\$16,412
5	0-3	\$2858.10	\$285	\$142	\$428	\$23,394
6	0-3	\$2994.90	\$299	\$149	\$449	\$31,405
7	0-3	\$2994.90	\$299	\$149	\$449	\$40,313
8	0-3	\$3102.30	\$310	\$155	\$465	\$50,413
9	0-3	\$3102.30	\$310	\$155	\$465	\$61,643
10	0-3	\$3270.30	\$327	\$163	\$490	\$74,434
11	0-4	\$3432.00	\$343	\$171	\$514	\$88,948
12	0-4	\$3624.90	\$362	\$181	\$543	\$105,435
13	0-4	\$3624.90	\$362	\$181	\$543	\$123,768
14	0-4	\$3790.20	\$379	\$189	\$568	\$144,453
15	0-4	\$3790.20	\$379	\$189	\$568	\$167,454
16	0-4	\$3956.70	\$395	\$197	\$593	\$193,331
17	0-5	\$4313.10	\$431	\$215	\$646	\$222,747
18	0-5	\$4560.00	\$456	\$228	\$684	\$255,903
19	0-5	\$4560.00	\$456	\$228	\$684	\$292,772
20	0-5	\$4698.60	\$469	\$234	\$704	\$334,020
		Total	Accrued			\$334,020

Note: Numerical values may not add up exactly due to rounding

from the current retirement system even after covering all service members. Table 5.4 shows the retirement accrual for a typical officer retiring after 20 years of service under this option. As with option 1, the 401(k) account is assumed to be invested in a diversified mutual fund yielding 11.2 percent, the average return over the past 20 years. This plan accrues over \$334,000 for a typical officer retiring at 20 years of service.

Both option 1 and option 2 above accrue significant retirement benefits under a 401(k) plan and still cover all service members. This is accomplished at less cost than the current retirement system which only covers 17 percent of the service members.

These two options have established the endpoints for normal cost accruals for a 401(k) plan. The higher normal cost of 29.8 percent is used as one end point and the lower normal cost of 5 percent is used for the other to reflect equivalence to typical corporate matching funds. The proposal presented below establishes the normal cost at 10 percent which falls between these two endpoints.

C. THE PROPOSAL

A contributory 401(k) retirement plan covering all service members with a maximum contribution of 10 percent for the individual and 10 percent for government matching funds

is proposed. The individual contribution rate is comparable to civilian retirement plans, while the government's

Table 5.5
401(k) Savings Plan with 10 Percent Matching
& 10 percent Member Contribution

Year	Rank	Base Pay (monthly)	Member Contrib.	Government Contribution (monthly)	Total (Monthly)	Annual Cumulative (Compounded at 11.2%)
1	0-1	\$1636.20	\$163	\$163	\$327	\$3,926
2	0-1	\$1636.20	\$163	\$163	\$327	\$8,293
3	0-2	\$2058.00	\$205	\$205	\$411	\$14,161
4	0-2	\$2556.00	\$255	\$255	\$511	\$21,882
5	0-3	\$2858.10	\$285	\$285	\$571	\$31,192
6	0-3	\$2994.90	\$299	\$299	\$598	\$41,873
7	0-3	\$2994.90	\$299	\$299	\$598	\$53,751
8	0-3	\$3102.30	\$310	\$310	\$620	\$67,216
9	0-3	\$3102.30	\$310	\$310	\$620	\$82,190
10	0-3	\$3270.30	\$327	\$327	\$654	\$99,244
11	0-4	\$3432.00	\$343	\$343	\$686	\$118,597
12	0-4	\$3624.90	\$362	\$362	\$724	\$140,579
13	0-4	\$3624.90	\$362	\$362	\$724	\$165,024
14	0-4	\$3790.20	\$379	\$379	\$758	\$192,603
15	0-4	\$3790.20	\$379	\$379	\$758	\$223,271
16	0-4	\$3956.70	\$395	\$395	\$791	\$257,774
17	0-5	\$4313.10	\$431	\$431	\$862	\$296,996
18	0-5	\$4560.00	\$456	\$456	\$912	\$341,204
19	0-5	\$4560.00	\$456	\$456	\$912	\$390,362
20	0-5	\$4698.60	\$469	\$469	\$939	\$445,360
			Total	Accrued		\$445,360

contribution is about twice that of a typical civilian 401(k) plan. The objective in choosing these contribution rates was to exceed the benefits of a typical civilian retirement plan while significantly reducing government outlays. However, contribution rates would be smaller for military personnel since the normal cost is computed on base pay instead of total pay as found in typical civilian 401(k) plans. Contribution rates are calculated in terms of base pay instead of Basic Military Compensation (BMC) since base pay is the only cash compensation that all service members receive.

The data in Table 5.5 shows that a substantial retirement benefit could be accumulated by every service member with much less cost to the government than the current system. The normal cost could be reduced from the current 29.8 percent of basic pay to 10 percent of basic pay. This would eventually result in a 66 percent reduction in federal outlays for military retirement and still provide an excellent retirement plan for all service members.

A significant drawback is that the service members who eventually retire at the twenty year point would receive less lifetime retirement compensation than they would under the current retirement system. Table 5.6 compares the lump sum equivalents after twenty years of service for each retirement plan discussed.

Some important differences between the plans shown below is that the current system covers only 17 percent while the other three cover all service members. In addition, the annual rate of return used to calculate the lump sum is 6.75 percent for the current system and 11.2 percent for the other three plans. The differences between lump sum retirement equivalents for the current retirement system and the three other plans are actually overstated. The lump sum equivalents in the current retirement system are based on FINAL PAY formulas and not REDUX. However, an estimate can be determined for the REDUX formula simply by compounding the normal cost of 29.8 percent of base pay at 6.75 percent over twenty years. This calculation yields \$429,250 as the expected lump sum for the REDUX formula for a commander retiring after twenty years.

Table 5.6
Comparison of Lump Sum Equivalents
for Several Retirement Plans

Retirement Option	Member Contribution	Government Matching	Compound Rate	Lump Sum Equivalent
FINAL PAY	0	40.0%	6.75%	\$650,972
REDUX	0	29.8%	6.75%	\$429,250
Option 1	0	29.8%	11.20%	\$663,587
Option 2	10%	5%	11.20%	\$334,020
The Proposal	10%	10%	11.20%	\$445,360

The proposed 401(k) retirement plan would still be more generous than most private sector retirement plans, since the 10 percent matching funds would be twice that found in a typical private sector 401(k) plan.

A concomitant pay raise to offset the member's contribution may not be necessary. The voluntary contribution by the service member is actually nothing more than a service member's savings account and therefore there is no apparent monetary loss to the service member. However, there is a perceived loss in that there is a loss of disposable income which may be justification for an increase in current compensation. In addition, the government's matching funds applied to the member's 401(k) account would more likely appear to the service member as visible current compensation and would thus be valued more than deferred compensation. RAND Corporation remarks on this issue: "Young people are known to have high personal discount rates, much higher than the government's, and therefore value a dollar of deferred (retirement) compensation less than it costs the government to provide." (Ref 1, pp. 19-20)

Previous chapters have demonstrated that the current military retirement system may see benefits eroded by congressional action. This is being driven by the cost of military retirement and the desire to reduce federal expenditures. In addition, the military retirement system only provides benefits for the few career service members who

stay in the service for twenty years or more. Adopting a service member contributory 401(k)-type plan will alleviate these problems and may still meet the objectives of using military retirement as a force management tool.

In a recent Washington Times article, Gregory McCarthy, a former active duty Marine officer, commented on military retirement reform.

The all-or-nothing 20 year demarcation is damaging to both the service and the individual, encouraging careerism and punishing all but those who serve a full career. Clearly a 401(k) style system of matching contributions would be superior. (Ref 25)

D. BENEFITS AND DRAWBACKS OF ADOPTING A 401(k)

1. Benefits

The benefits of privatizing military retirement for the military, the individual and the country could be enormous. The most apparent benefit would be to provide a retirement plan that includes all service members and not just the small minority who stay in the military for twenty years or more. A 401(k) plan with 10 percent matching would be a retirement plan that would greatly exceed that found in a typical private corporation while covering all service members. The normal cost to the government would be 10 percent per employee instead of the 29.8 percent currently allocated to the Military Retirement Fund.

Congress would be unable to retroactively reduce accrued benefits since these benefits would be in individual accounts instead of a government trust fund. Therefore the security of the retirement system would be enhanced, which in turn would increase the service members' confidence in the retirement system.

Accrued retirement benefits would be invested in corporations through 401(k) plans instead of government securities. The country would benefit from the increased capital available for corporations to expand and create jobs which will contribute to the long term prosperity of the economy.

2. Drawbacks

A 401(k) retirement plan requires the active participation and management of the investments by the recipient instead of the government. A rudimentary understanding of investments and retirement planning would be necessary if the long term retirement objectives are to be met. Since the military consist largely of young people, many of whom are inexperienced investors, this may pose a problem. However, the military does not have a monopoly on young inexperienced investors. Corporations have the same issues facing their employees and have dealt with this problem through retirement education and training.

Some service members may elect not to participate in such a retirement system. Young individuals tend to be more concerned with short term goals rather than providing for their own retirement. The military may remedy this problem by making participation mandatory. A 401(k) account would be established in the member's name and the government would contribute the maximum matching funds of 10 percent of base pay to this account. Thus retirement benefits would still accrue for the service member based on the government's contribution rate.

The 401(k) investments would be subject to the short term risk of the financial markets and the long term financial risk of the economy as a whole. The accrued retirement benefits could be invested in mutual funds diversified in hundreds of corporations in the U.S. and even world wide. As with any mutual fund, the portfolio would be designed and managed by a portfolio manager offering professional investment management. With the current retirement system, the accrued benefits are invested in a trust fund that is paid out based on a promised retirement formula when the service member reaches the twenty year point and retires.

The financial risk of the current military retirement plan lies with the financial health of the government and its willingness to fund the retirement system in the future. Given the recently proposed legislation to retroactively

reduce military retirement benefits and the current austere budgetary climate, the greater risk may be with the current retirement system.

The final drawback of adopting the proposed 401(k) plan is that the accrued retirement benefits could not be drawn upon until age 59 1/2 instead of at the current twenty year point. This may make a retroactively imposed 401(k) system politically infeasible and therefore, the 401(k) plan should only be introduced with new entrants.

The added economic risk of the financial markets is also a concern. The lifetime benefits under the proposed plan is dependent on the investment choices and financial health of the economy and subsequently there is no guarantee that expected returns will be realized. However, a 401(k) plan that covers all service members is a better option for new entrants into the military. For example, if an O-1 or E-1 entering service were given the option of a 17 percent chance of receiving a great retirement plan (the current retirement system) or a 100 percent chance of receiving an above average retirement plan (the proposed 401(k) plan), the choice would appear to be clear.

E. MAINTENANCE COSTS AND MANAGEMENT OF PRIVATIZING MILITARY RETIREMENT

The cost to set up and manage 401(k) plans is insignificant. Large companies such as General Motors, that

have over 200,000 employees, have a very small cost per employee. In many cases the installation and annual maintenance fee are waived completely where 401(k) providers stand to gain a large client. Additionally, the annual fees charged to the employee's account are usually as low as \$5 per year per employee. (Ref 27)

Since the account is managed by the 401(k) provider, the employer has no other responsibilities or liabilities with the account other than funding the contributions. The contributions are usually transferred to the employee's account through a payroll deduction. This essentially removes any control by the employer over the retirement benefits once they have been funded. However, this presents a particular problem for the military's goal for using retirement benefits as a force management tool and is addressed in the following chapter.

F. PRIVATIZATION AND THE MILITARY RETIREMENT FUND

The Military Retirement Fund was created as a trust fund to accrue future benefits for nondisability retirement pay, disability pay, survivor benefits and reserve retirement. Privatizing military retirement would eliminate the need for this fund since accrued benefits would be paid into individual 401(k) accounts. Nondisability retirement pay, reserve retirement pay and survivor benefits could be directly funded into the individual's 401(k) account. For

REDUX formulas, the allocation rate (taken from Table 2.1) is 0.7 percent of base pay for survivor benefits, and 9.3 percent for reserve retirement.

Disability pay may need a "stand alone" trust fund to fund benefits for disability pay because this program is more of an insurance program than a retirement plan. Service members may not have enough accrued assets in their own individual retirement accounts to provide for their income needs in the event of disability. A trust fund could be created that is funded by the same allocation rate of 1.0 percent applied to every service member's base pay. Disability benefits would therefore remain essentially unchanged.

The logical process for adoption of a privatized military retirement plan would be to phase in 401(k) accounts with new military recruits and slowly phase out the Military Retirement Fund. There would be no effect on the promised retirement benefits on current retirees or service members.

Another option would be to allocate the assets in the Military Retirement Fund to all service members based on longevity. However, this would be politically infeasible and unfair to vested service members to retroactively redistribute accrued retirement benefits. The allocation of the unfunded liability from the Military Retirement Fund would be difficult as well.

G. SUMMARY

A privatized retirement plan in the form of a 401(k) would be much less costly to the government while covering all service members under a retirement system. The normal cost for retirement benefits would be reduced from 29.8 percent to 10 percent (for this proposal) which would represents a reduction in federal outlays for nondisability pay of 66 percent. However, under the proposed 401(k) plan, future twenty year retirees would see a net reduction in their lifetime stream of benefits, which would then be more in line with civilian plans. If individuals, who are certain that they will remain in military service for twenty years or more, make career decisions based on the present value of their expected lifetime stream of benefits, these individuals may decide not to join the military. This problem may be alleviated by increasing the government matching funds.

The problems associated with adopting a 401(k) plan are not unique to the military. Corporations face the same challenges of encouraging employee participation and educating employees on retirement planning.

The Military Retirement Fund would need to be phased out over time as new service members are covered under a 401(k) plan. A trust fund for disability pay should be established and funded by the same allocation rate that is currently applied to the Military Retirement Fund.

VI. RETIREMENT COMPENSATION AND FORCE MANAGEMENT

A. INTRODUCTION

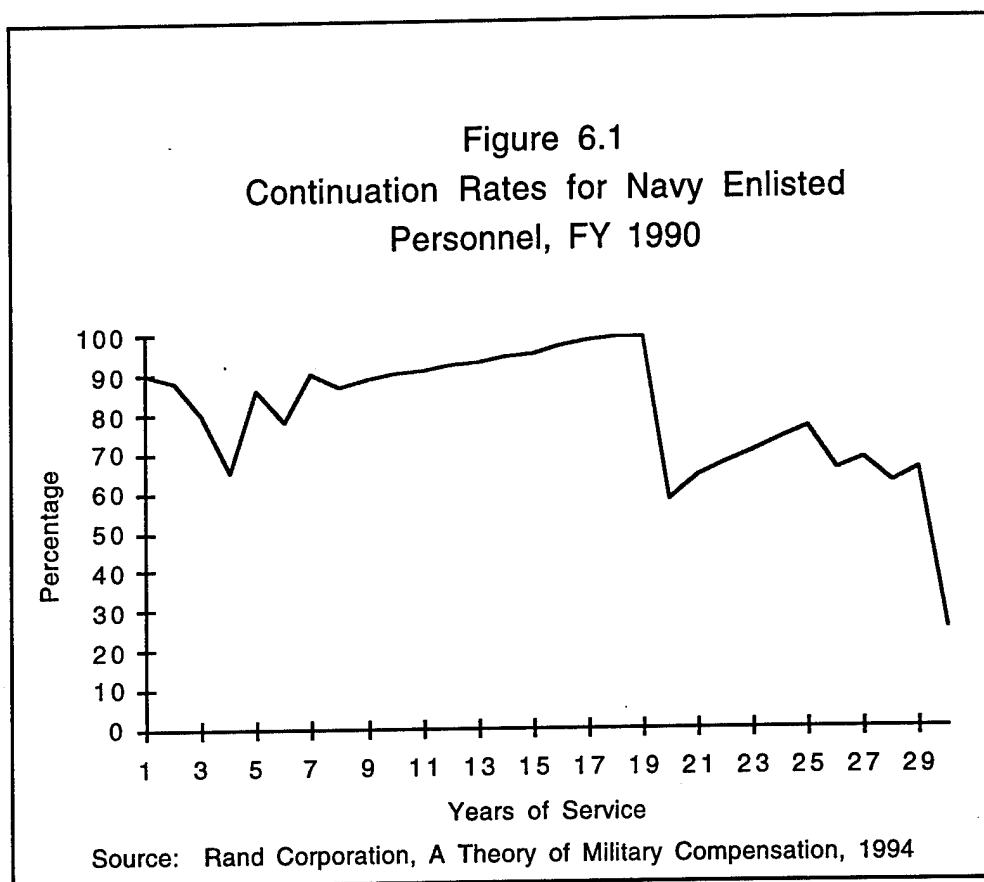
Force management is a term used by the military to describe the process by which the military meets its required manpower objectives. This is accomplished by shaping the distribution of officers and enlisted personnel, by rank, years of service and job specialty. Retaining the required distribution of officer and enlisted service members is essential for the military to meet its manpower objectives, and therefore directly affects readiness. Force management is accomplished by several different mechanisms. These include special and incentive pays, selected reenlistment bonuses, basic pay and retirement compensation. (Ref 19 pp. 7-18)

B. CURRENT RETIREMENT SYSTEM AND FORCE MANAGEMENT

The military retirement system must simultaneously maintain a young, vigorous force and provide promotional opportunities for junior personnel. The current system which provides retirement benefits only after twenty years of service has a dramatic effect on officer and enlisted distributions. Figures 6.1 and 6.2 illustrate this effect.

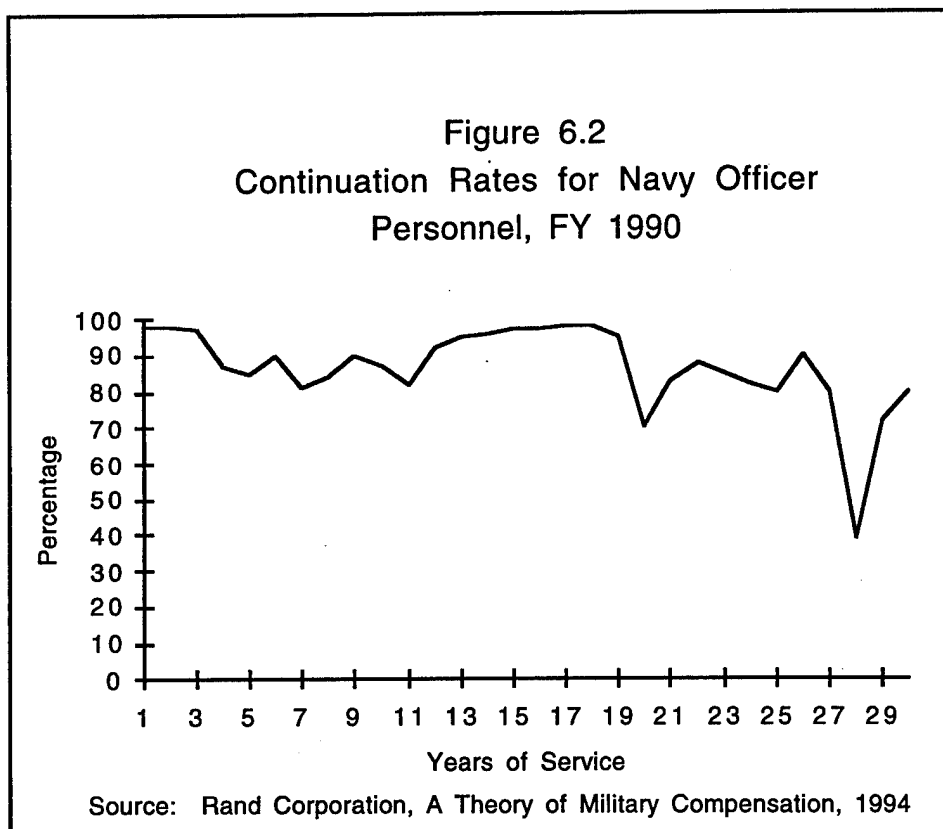
The two charts show continuation rates for both officer and enlisted service members with various years of service. The continuation rate is the percentage of service members that stay in the military. Three significant reductions in

continuation rates occur over a typical thirty year period. The first reduction occurs between three and five years of service which is after the initial enlistment period has expired, and a large number of service members leave the service. The second occurs at the time the twenty year point is reached, when military members first become eligible



for retirement benefits. The third and final decline occurs at the thirty year point for enlisted personnel, after which no further retirement benefits are earned by further military service. (Ref 19 pp. 7-18)

Clearly, retirement has a dramatic effect on retention rates after the initial enlistment period. After the initial enlistment obligation expires (3-6 years of service), the continuation rates for officers and enlisted members consistently increase as the twenty year point approaches, only to drop off dramatically when retirement eligibility is reached.



RAND completed an extensive study on military compensation policies in 1994. They concluded that the retirement system provides strong effort and retention incentive to mid-career personnel. Effort incentive is the

motivation to excel and advance. However, the twenty year retirement system creates a mid-career bulge and reduces the effort incentive of more junior service members because there are fewer promotional opportunities available. In addition, effort incentive for service members eligible for retirement is lowered because they are already guaranteed a retirement pension. RAND also concluded that the current retirement system is beneficial since individuals are given incentive to separate voluntarily instead of being forced to retire. (Ref 19 p. 118)

C. CRITICISMS OF THE CURRENT MILITARY RETIREMENT SYSTEM

Criticisms of the current military retirement system as it relates to force management objectives were reviewed by the RAND study in 1994. RAND acknowledged that the twenty year retirement system does not provide for the active management of mid-career service members. Since a service member has no accrued retirement benefits prior to twenty years, any involuntary separation before this point can have significant adverse financial consequences for the service member. The services have been reluctant to separate service members involuntarily after about ten years of service because of this financial hardship. RAND refers to this as the implicit-contract problem. (Ref 19 pp. 19-21)

Another criticism of the military retirement system is the negative impacts created in the attempt to maintain the youth and vigor of the force. Youth and vigor are essential for specialties such as infantrymen. However, for specialties such as doctors and nurses, where experience and costly training are more highly valued, the twenty year retirement system inhibits retention of these qualified individuals beyond twenty years of service. Another example is pilots who, after their typical useful flying career of ten to twelve years, are replaced by more youthful officers and reassigned to administrative or support jobs. RAND comments on this problem: "The creation of (possibly unnecessary) infrastructure billets to accommodate 20-year careers is another illustration of the implicit-contract problem". (Ref 19 pp. 19-21)

D. RETIREMENT PRIVATIZATION AND FORCE MANAGEMENT

The military retirement system affects force structure by offering retirement benefits at a certain point during the typical career. Generally, this point is reached after twenty years of service, but on occasions such as drawdowns, this date has been shifted forward to provide financial incentives for service members to leave the military early. The current military retirement system has been used effectively to encourage voluntary separations during drawdowns and create promotional opportunities for more

junior members. Any attempt to implement a privatized retirement plan should examine its applicability to force management. A privatized retirement plan may be a more effective and flexible force management tool, but is not without its problems. Many private retirement plans, such as 401(k)s and 403(b)s, are portable. When an employee separates from employment, the accrued retirement benefits can be withdrawn or "rolled over" into another account. These types of retirement plans reduce the incentive for an employee to stay with an employer, because there is no monetary loss in benefits when the employee leaves.

Portability would create a substantial problem for the military, as retention of experienced service members is essential for positions of higher responsibility. One objective for retirement policy is to provide an incentive for individuals to stay in the military. The military cannot recruit individuals from the private sector to command ships and airwings. It must develop qualified officers over time through training and experience. Thus, the retention of qualified officers is essential for the military to meet its manpower objectives, and any privatized retirement plan must consider the impact on retention and the force management objectives of military retirement.

Several options are available to enable a privatized military retirement system to meet force management objectives. These options are presented below.

1. Graduated Matching Funds

A military retirement system might be reformed to link accrued rates to years of service. For example, during the first enlistment period, when retirement has little impact on retention, no matching funds would be applied to the service member's 401(k) account. As the service member's longevity increases, the matching funds would be increased appropriately to encourage retention. To encourage members to leave military service later in their career to provide promotional opportunities for younger service members, matching funds could be lowered with longevity.

Applying graduated matching funds in this manner would minimize the typical mid-career bulge in the personnel distribution by reducing the incentive to stay in the military at this point. This would be a more flexible and efficient force management tool and aid in the proper distribution of officers by years in service.

2. Withholdings for Early Separation

Another means of discouraging early voluntary separation involves applying a penalty to the accrued retirement benefits for each separating service member. For example, a separation fee ranging anywhere from 0 percent to 100 percent could be applied to the balance of the 401(k) account, as a disincentive to separate from military service. If the

military needs to increase the retention rate of a certain year group or specialty, this separation fee can be used to provide a disincentive for separation.

There is a precedent for this in civilian retirement plans. The 403(b) plan has an early withdrawal fee if the employee decides to "roll over" the retirement funds. The fees are graduated, typically ranging from 7 percent if withdrawn within the first year, decreasing to 0 percent if withdrawn after the seventh year. However, the fee is applied when the employee withdraws the funds and not necessarily when he leaves his job.

The military system could apply a similar fee structure based on longevity which could be tailored to produce the desired distribution of officers and enlisted people by years of service or job specialty.

This practice of "fining" accrued retirement benefits may be perceived as breaking a contract. However, if the practice is acknowledged before the service member enters military service, this means of encouraging retention could be used effectively.

3. Elimination of Retirement as a Force Management Tool

One final option would be to eliminate the military retirement system as a force management tool altogether. RAND asserts that all the objectives of the military

retirement system can be accomplished by other personnel and pay policies. (Ref 19, p. 118) However, shifting emphasis away from retirement compensation and towards current pay would require a significant reliance on involuntary separations. This may have a lasting and significant affect on morale which could be more costly to the government in lost productivity.

E. SUMMARY

Force management is an essential tool that the military uses to meet required manpower objectives. One instrument used to meet these goals and obtain the desired manpower distribution is military retirement compensation.

Evidence suggests that under the current military retirement system, a strong incentive exists for mid-career service members to stay in the military for twenty years or more. The all or nothing twenty year retirement system presents a severe financial penalty in lost lifetime benefits for any member desiring to leave military service before twenty years of service. Thus, critics argue that the twenty year retirement system adversely affects the flexibility and management of the force structure by retaining service members who aren't needed.

Privatizing military retirement can remedy some of the problems associated with the twenty year retirement system. Two options were outlined which showed that a privatized

retirement plan may be used as a force management tool by altering the funds paid by the government into the member's 401(k) account or by imposing a separation penalty on the accrued retirement benefits. Adding or subtracting retirement benefits in this manner can have a substantial impact on the distribution and retention of service members. This may provide a more flexible force management tool that will allow policy makers to more easily achieve the desired manpower distribution. A third option eliminates the force management objectives of military retirement entirely and relies on other personnel policies to achieve the desired distribution of service members.

The privatization of military retirement would allow accrued retirement benefits to be in the hands of individuals instead of relying on the perceived promise by the government to pay out future benefits. In addition, the assets would be invested, e.g. in equity mutual funds, which have returned on average 11.2 percent over the past twenty years vice the expected 6.75 percent return in the Military Retirement Fund.

VII. CONCLUSIONS AND RECOMMENDATIONS

A. SUMMARY

The goal of the thesis was to explore the possibility of applying private sector retirement options to the US military retirement system. It began with the origins and evolution of military retirement which established the purpose, context, and logic of the current system.

The foundations of the current military retirement system were established in 1916 and the twenty year vesting point was adopted by all four services in 1948. Although over ten major studies have been conducted on military retirement reform since 1948, the system has remained fundamentally unchanged.

Many of the major studies concentrated narrowly on equity, cost reduction or force management. A major contribution from the Fifth Quadrennial Review of Military Compensation was to establish the objectives of the military retirement system. These objectives are to provide a competitive retirement plan, promotional opportunities for younger service members, future economic security, and a pool of experienced personnel who would be subject to recall to active duty during time of war or national emergency.

The creation of the Military Retirement Fund and the adoption of accrual based accounting in 1984 made military retirement more visible in the Federal Budget. Congress was now required to fund retirement benefits as they were earned,

thus making the apparent cost of new entrants into the military more evident. This has placed more pressure on reducing the cost of retirement benefits.

Military retirement costs between 1.2 and 2.0 times more than civilian retirement plans. In 1993, the Military Retirement Fund paid out 25 billion dollars to retirees, representing a sizable percentage of national defense resources. Historically, military retirement policies have been used as a force management tool to encourage separation of personnel during drawdowns, provide promotional opportunities for younger service members or to retain service members when needed. However, since 1981, the majority of the legislative changes to military retirement have specifically been targeted to reduce the cost of the program.

One cause of the high cost of military retirement is the early age at which service members become eligible and receive benefits. These benefits continue to be received throughout the retiree's lifetime and therefore sum to a substantial benefit for the recipient. The average age that a service member retires from military service is 42 for enlisted and 46 for officers, far younger than the private sector average of 62. An enlisted person can retire from military service as early as age 37.

Despite the tremendous cost of military retirement, the system does not cover all service members. Only sixty five

percent of all new officers and fourteen percent of all new enlistees actually reach the twenty year point and receive retirement benefits. This yields a weighted average of seventeen percent for all personnel.

The high cost of military retirement coupled with relatively few beneficiaries has created a perceived generosity in military retirement benefits that greatly exceeds that found in a typical private sector retirement plan. As a result, some in Congress have proposed legislation intended to dramatically reduce retirement benefits, in some cases retroactively.

DOD budgets for military retirement benefits by determining an allocation rate which is applied to the base pay of every service member. The allocation rates (or normal cost) per service member that are deposited into the Military Retirement Fund range from 40 percent for FINAL PAY formulas to 29.8 percent for REDUX. The normal cost is based, in part, on accruing retirement benefits for the seventeen percent of service members who actually retire.

The retirement plans that the private sector relies upon to compensate employees were then explored. Private corporations offer traditional pensions, 401(k)s, 403(b)s and several other plans to provide for employee retirement benefits. The trend in corporate retirement plans has been towards 401(k) salary reduction plans. Over 96 percent of corporations with over 5000 employees have adopted 401(k)

plans. (Ref. 2, p. 38) This trend is largely in response to a changing regulatory environment, but is also a result of corporations attempting to reduce their costs.

A 401(k) plan that covers all service members was then proposed as an option to provide retirement benefits to military personnel. A privatized retirement plan in the form of a 401(k) plan would be much less costly to the government. The proposed 401(k) plan would eventually decrease federal outlays for military retired pay by 66 percent, as new entrants join under the new plan, while covering all service members.

However, a 401(k) retirement system requires a rudimentary knowledge of investing and more active participation by the employee. Corporations have faced the same problems and have dealt with them by providing education and retirement planning seminars. In addition, the proposed 401(k) plan, would only allow retirement benefits to be drawn upon after age 59 1/2 instead of at the current twenty year point. Even though the accrued retirement benefits would be greater under the proposed plan they can not be withdrawn until age 59 1/2 without substantial penalties. This would put military retirement compensation in line with many other private sector retirement plans.

A significant benefit of the proposed plan is that all service members would be covered under a retirement system. In addition, service members would have control of their

accrued retirement benefits instead of relying on a trust fund with a promise to make payments based on a retirement formula that may be changed in the future.

Finally, the force management objectives of the current military retirement system were reviewed and applied to a new privatized retirement plan. Studies have shown that the current twenty year retirement system encourages careerism, may retain unnecessary service members and encourages needed officers and enlisted to separate at the twenty year point.

A 401(k) plan provides a portable retirement option for employees, which reduces incentives for employees to stay with one corporation. Since the military cannot hire experienced qualified individuals to command ships and squadrons, retention is essential. A 401(k) plan could be used to accomplish retention goals by providing variable matching funds based on longevity depending on the desire to retain or release a group of service members. A 401(k) type of retirement system could be tailored to be a much more effective and flexible force management tool for the military. However, there has been no serious study of the effects on manpower distribution and other force management issues resulting from privatizing military retirement.

B. RECOMMENDATIONS

The military retirement system is generous, expensive and may be difficult to justify in today's austere budgetary

climate. A retirement system should cover all service members and not just the few who stay in the military for twenty years or more.

The thesis has provided a framework that policy makers may use to reinvent military retirement. It was shown that a privatized plan will cover all service members at much less cost, while allowing greater personal financial control and flexibility. A 401(k) plan that allows access to stock mutual funds and greater returns than the current Military Retirement Fund will provide more benefits to the service member for less cost to the government. Some of the current military retirement system's shortcomings can be rectified by reducing the costs (therefore the benefits), by allowing earlier than twenty year vesting or by covering all service members. However, defined pension plans such as the current military retirement system cannot simply be modified to take advantage of greater returns, portability or allow for greater personal control.

Privatizing military retirement will eliminate most of the functions that the Military Retirement Fund performs. Accruing benefits for nondisability pay, survivor benefits and reserve retirement will be accomplished by the 401(k) retirement plan. However, disability pay would need its own trust fund to provide disability insurance for service members. This new trust fund would use the identical allocation rate that is currently being used to fund

disability pay. Thus, the current Military Retirement Fund should be replaced with a trust fund that provides disability only insurance for service members.

It is recommended that further study be completed on the effect that a portable retirement plan may have on retention. Significant negative effects on force management may be less apparent and many issues of retention as it relates to a portable retirement plan were not addressed. This thesis has provided a framework in which a privatized plan could be created. Many options are left open for policy makers such as changing the government matching rates, vesting eligibility, or separation fees.

A further recommendation is to expand the stated objectives of military retirement to include cost effectiveness and equity.

C. CONCLUSION

The fate of military retirement is uncertain at best. The tremendous cost and generosity of military retirement coupled with deficit reduction efforts has focused significant congressional attention on this program. Since 1981, Congress has frequently passed legislation to reduce military retirement benefits. In the 1990s, this trend appears to be accelerating, with the introduction of several bills which would dramatically reduce retirement benefits.

Several of these bills actually seek to reduce military retirement benefits retroactively.

A 401(k) plan will put accrued retirement benefits in the hands of the service members, minimizing congressional control and thus enhancing the security of military retirement. In addition, a 401(k) plan will provide coverage for all service members at much less cost to the government. The time has come to rethink the role of military retirement.

D. FURTHER RESEARCH OPPORTUNITIES

Military compensation encompasses a broad array of issues that interrelate and affect each other. This thesis has scratched the surface of the issues that encompass military retirement. The effects of a privatized retirement system on recruitment, retention and motivation have not been fully analyzed.

A similar thesis could be applied to other organizations that mirror the current military retirement system such as the Coast Guard, the Commissioned Corps of the Public Health Service and the Commissioned Corps of the National Oceanic and Atmospheric Administration. In addition, the possibility of privatizing Social Security is an option that could draw on some of the research from this thesis.

LIST OF REFERENCES

1. National Defense Research Institute, A Theory of Military Compensation and Personnel Policy, RAND, 1994.
2. Barr, Stephen, "Small is Beautiful", CFO: The Magazine for Senior Financial Executives, April, 1995.
3. Pond, Jonathan D., The New Century Family Money Book, Dell Publishing, New York, 1993.
4. Employee Benefits Research Institute, The Changing Profile of Pensions in America, 1985.
5. General Accounting Office, Military Compensation Comparisons with Civilian Compensation and Related Issues, June, 1986.
6. Department of Defense, Report of the Fifth Quadrennial Review of Military Compensation: Uniformed Service Retirement System (Vol. I), Lt Colonel J. L. Peel, Fort McNair, D.C., December 14, 1987.
7. Department of Defense, Seventh Quadrennial Review of Military Compensation: Compensation Structure, Major Topical Summary (MTS) 1, August, 1992.
8. Department of Defense, Office of the Actuary, Statistical Report on the Military Retirement System, September 30, 1994.
9. Department of Defense, Office of the Actuary, Valuation of the Military Retirement System, 30 September, 1992.

10. Department of Defense, Office of the Secretary of Defense, Military Compensation Background Papers, USGPO, Washington, D.C., January 1984.
11. Nunn, Sam, Senate Armed Services Committee, Congressional Record, June 30, 1994.
12. Smithers, Samuel J., Budgeting and Investing in the Military Retirement Fund, U.S. Naval Postgraduate School, December, 1993.
13. President's Commission on Military Compensation, Report of the President's Commission on Military Compensation, USGPO, Washington, D.C., April, 1978.
14. Concord Coalition, ALERT 4, Compuserve, Concord Coalition Library, July 10, 1995.
15. Congressional Budget Office, Reducing the Deficit: Spending and Revenue Options February, 1995.
16. Hardy, Don, ENTITLEM.522, E-Mail response from Senator Simpson's Office, July 14, 1995.
17. Maze, Rick, "Chopping Retiree COLAs", Navy Times, April 10, 1995.
18. Vise, David A., "Government Has Massive Pension Shortfall", Washington Post, November 22, 1993.
19. National Defense Research Institute, A Theory of Military Compensation and Personnel Policy, RAND, 1994.

20. Congressional Budget Office & General Accounting Office, Analysis of the Grace Commission's Major Proposal for Cost Control, USGPO, February 1984.
21. Hagar, George, and Rubin, Alissa J., "Congress Gives Resounding Yes To Balanced-Budget Plan", Congressional Quarterly, July 1, 1995.
22. Clark, Robert L., and McDermed, Anne A., The Choice of Pension Plans in a Changing Regulatory Environment, American Enterprise Institute, 1990.
23. Honan, Stephen E., An Account for Saving Active Pay (ASAP): An Employer-Sponsored Savings Plan for Active Duty Military Personnel, U.S. Naval Postgraduate School, December, 1990.
24. Lasker, J. K., Your Income Tax 1995, Macmillan Press, New York, New York, 1995.
25. McCarthy, Gregory C., "Military retirement: A middle-class entitlement in need of reform", Washington Times, August 18, 1985.
26. Hamblet, William, "Changing Military Retirement-For the Better", U.S. Naval Institute Proceedings, January, 1995.
27. Hager, George, "Clinton Shifts Tactics, Proposes Erasing Deficit in 10 Years", Congressional Quarterly, June 17, 1995.
28. Report of the Commission on Roles and Missions of the Armed Forces, Directions for Defense, USGPO, May 24, 1995.

29. Telephone conversation between Ken Paieski, Vice President, Fidelity Institutional Retirement Services Company and LT Mark D. Pyle, May 26, 1995.

BIBLIOGRAPHY

Barr, Stephen, "Small is Beautiful", CFO: The Magazine for Senior Financial Executives, April, 1995.

Clark, Robert L., and McDermed, Anne A., The Choice of Pension Plans in a Changing Regulatory Environment, American Enterprise Institute, 1990.

Concord Coalition, ALERT 4, Compuserve, Concord Coalition Library, July 10, 1995.

Congressional Budget Office & General Accounting Office, Analysis of the Grace Commission's Major Proposal for Cost Control, USGPO, February, 1984.

Congressional Budget Office, The Military Retirement System: Options for Change, January, 1978.

Congressional Budget Office, Reducing the Deficit: Spending and Revenue Options February, 1995.

Federal Employee Compensation Equity Act of 1987, USGPO, Washington, D.C., April 22, 1987.

Crenshaw, Albert B., "Grabbing the Nest Egg Before it Hatches", The Washington Post National Weekly Edition, March 21-27, 1994.

Department of Defense, Report of the Fifth Quadrennial Review of Military Compensation: Uniformed Service Retirement System (Vol. I), Lt Colonel J. L. Peel, Fort McNair, D.C., December 14, 1987.

Department of Defense, Office of the Actuary, Statistical Report on the Military Retirement System, 30 September, 1994.

Department of Defense, Office of the Actuary, Valuation of the Military Retirement System, 30 September, 1992.

Department of Defense, Office of the Secretary of Defense, Military Compensation Background Papers, USGPO, Washington, D.C., January, 1984.

Department of Defense Retirement Board of Actuaries, Report to the President and Congress on the Status of the Department of Defense Military Retirement Fund, 31 December, 1992.

Department of Defense, Seventh Quadrennial Review of Military Compensation: Compensation Structure, Major Topical Summary (MTS) 1, August, 1992.

Employee Benefits Research Institute, The Changing Profile of Pensions in America, 1985.

General Accounting Office, DoD BUDGET, Budget Impact of Proposed Reduced Retirement Fund Payments, 5 June, 1992.

General Accounting Office, Military Compensation, Comparisons with Civilian Compensation and Related Issues, June, 1986.

General Accounting Office, Military Compensation, Comparisons with Federal Civil Service Compensation, November, 1987.

Hager, George, "Clinton Shifts Tactics, Proposes Erasing Deficit in 10 Years", Congressional Quarterly, June 17, 1995.

Hagar, George, and Rubin, Alissa J., "Congress Gives Resounding Yes To Balanced-Budget Plan", Congressional Quarterly, July 1, 1995.

Hamblet, William, "Changing Military Retirement-For the Better", U.S. Naval Institute Proceedings, January, 1995.

Hardy, Don, ENTITLEM.522, E-Mail response from Senator Simpson's Office, July 14, 1995.

Henderson, David R., The Fortune Encyclopedia of Economics, Warner Books, New York, 1993.

Honan, Stephen E., An Account for Saving Active Pay (ASAP): An Employer-Sponsored Savings Plan for Active Duty Military Personnel, U.S. Naval Postgraduate School, December, 1990.

House Armed Services Committee, Overview of the Military Retirement System, USGPO, Washington, D.C., 1984.

Lasker, J. K., Your Income Tax 1995, Macmillan Press, New York, New York, 1995.

Lawler, Edward E., Pay and Organization Development, Addison-Wesley Inc., Reading, Massachusetts, 1983.

Maze, Rick, "Chopping Retiree COLAs", Navy Times, April 10, 1995.

McCarthy, Gregory C., "Military retirement: A middle-class entitlement in need of reform", Washington Times, August 18, 1985.

National Defense Research Institute, A Theory of Military Compensation and Personnel Policy, RAND, 1994.

National Defense Research Institute, Military Pay Gaps and Caps, RAND, 1994.

Nunn, Sam, Senate Armed Services Committee, Congressional Record, June 30, 1994.

Pond, Jonathan D., The New Century Family Money Book, Dell Publishing, New York, 1993.

Public Law 95-595, "Federal Government Pension Plans," November 4, 1978.

Public Law 98-94, Chapter 74-Department of Defense Military Retirement Fund, 24 September, 1983.

President's Commission on Military Compensation, Report of the President's Commission on Military Compensation, USGPO, Washington, D.C., April, 1978.

Report of the Commission on Roles and Missions of the Armed Forces, Directions for Defense, USGPO, May 24, 1995.

Smithers, Samuel J., Budgeting and Investing in the Military Retirement Fund, U.S. Naval Postgraduate School, December 1993.

United States Army Research Institute for the Behavioral and Social Sciences, Military Compensation and Personnel Retention: Models and Evidence, February, 1991.

Vise, David A., "Government Has Massive Pension Shortfall",
Washington Post, November 22, 1993.

Telephone conversation between Ken Paieski, Vice President,
Fidelity Institutional Retirement Services Company and LT
Mark D. Pyle, May 26, 1995.

INITIAL DISTRIBUTION LIST

- | | | |
|-----|--|---|
| 1. | Defense Technical Information Center
8725 John J. Kingman Rd., STE 0944
Ft. Belvoir, VA 22060-6218 | 2 |
| 2. | Library, Code 13
Naval Postgraduate School
Monterey, CA 93943-5002 | 2 |
| 3. | Department of the Navy
Office of Program Appraisal
1400 Navy, Pentagon Rm 4D723
Washington, D.C. 20350-1400
Attn: LCDR Karen Coyle | 2 |
| 4. | Navy Department
Bureau of Personnel (PERS 20)
Washington, D.C. 20370
Attn: LCDR Brandon | 1 |
| 5. | Department of Defense
Office of the Actuary
Attn.: Ben Gottlieb
1600 North Wilson Boulevard
Suit 400
Arlington, VA 22209-2593 | 1 |
| 6. | The Honorable John R. Kasich
1131 Longworth House Office Building
U.S. House of Representatives
Washington, D.C. 20515 | 2 |
| 7. | LCDR Bill Cloughly
1401 Wilson BLVD. 4th Floor
Arlington, VA 22209 | 2 |
| 8. | Concord Coalition
1019 19th Street N.W., Suite 810
Washington, D.C. 20036 | 1 |
| 9. | Don Hardy
261 Dirksen Senate Office Building
U.S. Senate
Washington, D.C. 20510 | 2 |
| 10. | Fidelity Investments
Ken Paieski
455 Market Street, Suite 850
San Francisco, CA 94105 | 1 |

- | | | |
|-----|--|---|
| 11. | Dr. Richard Doyle
Code SM/Dy
Department of Systems Management
Naval Postgraduate School
Monterey, CA 93943-5103 | 1 |
| 12. | Commander Louis Kalmar
Code SM/K1
Department of Systems Management
Naval Postgraduate School
Monterey, CA 93943-5103 | 1 |
| 13. | Captain Ronald William Pyle, USN, Ret.
886 Cedarcreek Rd
Blackstone, VA 23824 | 1 |
| 14. | LT Mark D. Pyle
1002-5 Pacific Grove Ln
Pacific Grove, CA 93950 | 1 |
| 15. | Devone Henry
Naval Postgraduate School
Code 92DH
Monterey, CA 93943-5000 | 1 |
| 16. | John E. Mutty
Code SM/mu
Department of Systems Management
Naval Postgraduate School
Monterey, CA 93943-5103 | 1 |